

MZ-X500

MZ-X300

USER'S GUIDE (Basics)

GUÍA DEL USUARIO (Conceptos básicos)

Please keep all information for future reference.

Guarde toda información para tener como referencia futura.

Safety Precautions

Before trying to use the Digital Keyboard, be sure to read the separate "Safety Precautions".

Precauciones de seguridad

Antes de utilizar el teclado digital, asegúrese de leer las "Precauciones de seguridad" definidas por separado.

- You can download the separate "Tutorial Manual" and "Appendix" from the website below.
<http://world.casio.com/>

- El manual "Tutorial" por separado y el "Apéndice" pueden descargarse del siguiente sitio web.
<http://world.casio.com/>

Declaration of Conformity

Model Number: MZ-X500/MZ-X300

Trade Name: CASIO COMPUTER CO., LTD.

Responsible party: CASIO AMERICA, INC.

Address: 570 MT. PLEASANT AVENUE, DOVER, NEW JERSEY 07801

Telephone number: 973-361-5400

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Important!

Please note the following important information before using this product.

- Before using the AD-E24250LW Adaptor to power the product, be sure to check the AC Adaptor for any damage first. Carefully check the power cord for breakage, cuts, exposed wire and other serious damage. Never let children use an AC adaptor that is seriously damaged.
- The product is not intended for children under 3 years.
- Use only the CASIO AD-E24250LW adaptor.
- The AC adaptor is not a toy.
- Be sure to disconnect the AC adaptor before cleaning the product.

Declaration of Conformity According to EU Directive

Manufacturer:

CASIO COMPUTER CO., LTD.

6-2, Hon-machi 1-chome, Shibuya-ku, Tokyo 151-8543, Japan



Responsible within the European Union:

Casio Europe GmbH

Casio-Platz 1, 22848 Norderstedt, Germany

www.casio-europe.com



Contents

General Guide	EN-4
Installing the Music Stand	EN-6
Returning the Digital Keyboard to Its Factory	
Default Settings	EN-6
Separate Tutorial Manual	EN-6
Power Outlet	EN-7
Using an AC Adaptor	EN-7
Turning Power On or Off	EN-7
Connections	EN-9
Connecting Headphones.....	EN-9
Connecting Audio Equipment or an	
Amplifier.....	EN-9
Bundled and Optional Accessories.....	EN-11
Operations Common to All Modes	EN-12
Using the Display Screen	EN-12
Performing Operations	EN-13
Demo Song	EN-16
Playing the Demo Tunes.....	EN-16
Playing with Different Tones	EN-17
Selecting a Tone with the TONE Buttons	EN-17
Splitting the Keyboard between Two Tones ..	EN-17
Layering Two Tones	EN-19
Adjusting the Keyboard Volume Balance	EN-19
Using the Metronome	EN-19
Changing the Tempo Setting	EN-20
Sounding Arpeggio Phrases Automatically (Arpeggiator)	EN-21
Controlling Sounds	EN-22
Using a Pedal	EN-22
Sustaining Notes.....	EN-23
Using the Pitch Bend Wheel	EN-23
Modifying Notes with the Modulation Wheel and/or Knobs	EN-23
Using the Sliders	EN-24
Changing the Pitch of Notes (Transpose, Octave Shift)	EN-25
Using Auto Accompaniment	EN-27
Playing an Auto Accompaniment	EN-27
Using Recommended Tones and Tempos (One-Touch Presets)	EN-31
Adding Harmony to Melody Notes (Auto Harmonize)	EN-31
Using Pads	EN-32
Playing Back Short Phrases	EN-32
Sounding Sampled Sounds.....	EN-33
Specifying an Auto Accompaniment Chord Progression (Chord Play) (MZ-X500 only)	EN-33
Assigning Multiple Functions (MZ-X500 only)	EN-34
Changing the Function of a Specific Pad	EN-34
Changing Pad Settings	EN-35
Saving a Bank.....	EN-35
Stopping Playback of All Pads	EN-35
Synchronizing Pads with Accompaniment ..	EN-36
Recording Data to a Pad.....	EN-36
Music Presets	EN-38
Recalling Preset Data	EN-38
Registering Tone and Rhythm Setups	EN-39
Recording and Playback	EN-41
Recording to Digital Keyboard Memory (MIDI Recorder)	EN-43
Recording to a USB Flash Drive (Audio Recorder)	EN-46
Configuring Digital Keyboard Settings	EN-49
Configuring Digital Keyboard Settings	EN-49
USB Flash Drive	EN-61
Connecting a USB Flash Drive to and Detaching It from the Digital Keyboard ..	EN-62
Formatting a USB Flash Drive	EN-63
Saving Standard Song Data to a USB Flash Drive.....	EN-63
Saving Digital Keyboard Data to a USB Flash Drive.....	EN-63
Loading Data from a USB Flash Drive to Digital Keyboard Memory.....	EN-64
Deleting Data from a USB Flash Drive	EN-64
Connecting to a Computer	EN-65
Minimum Computer System Requirements ..	EN-65
Using MIDI	EN-66

Reference**EN-67**

Error Messages.....	EN-67
Troubleshooting	EN-68
Product Specifications.....	EN-70
Operating Precautions	EN-72

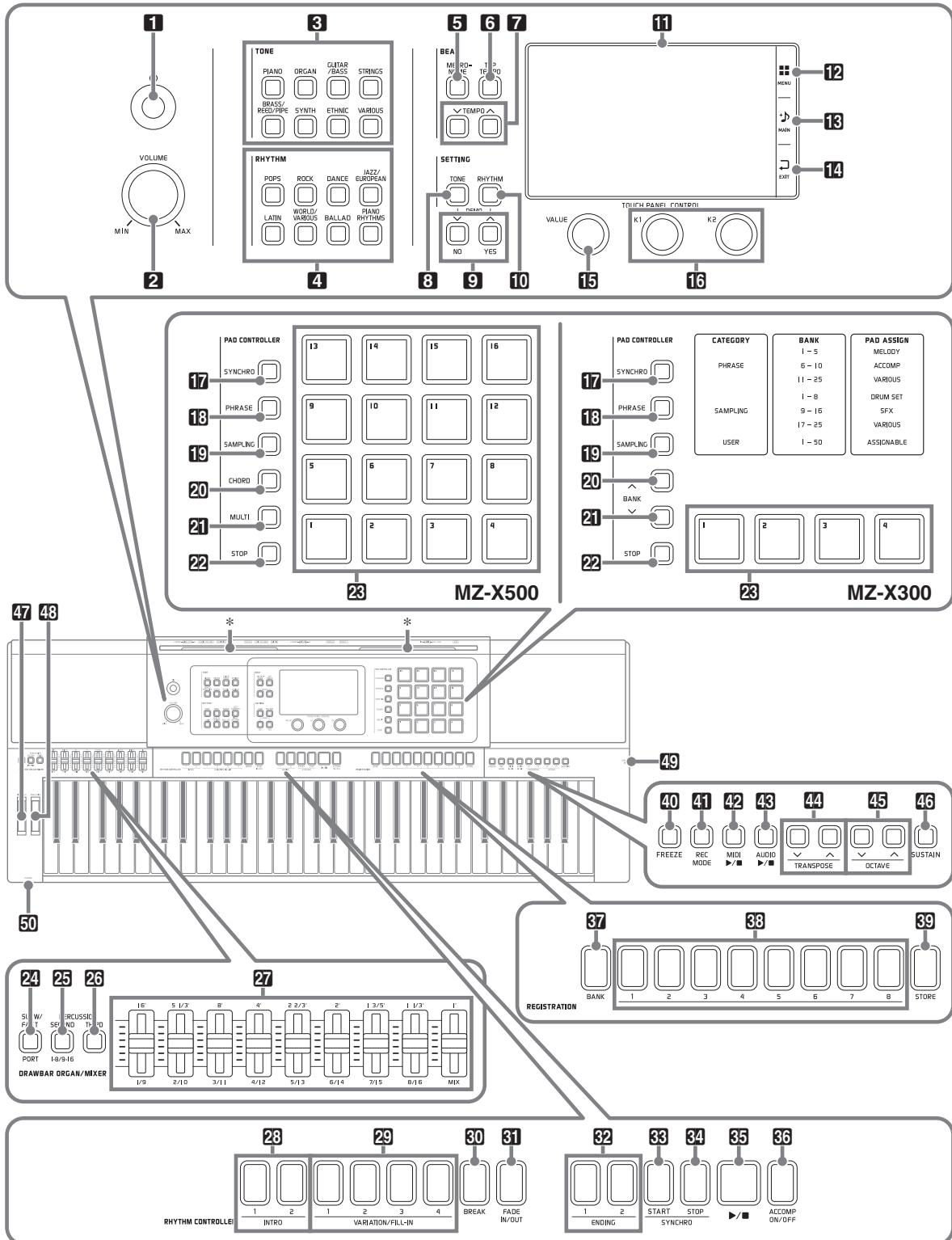
Information**A-1**

Fingering Guide.....	A-1
Chord Example List.....	A-3

Company and product names used in this manual may be registered trademarks of others.

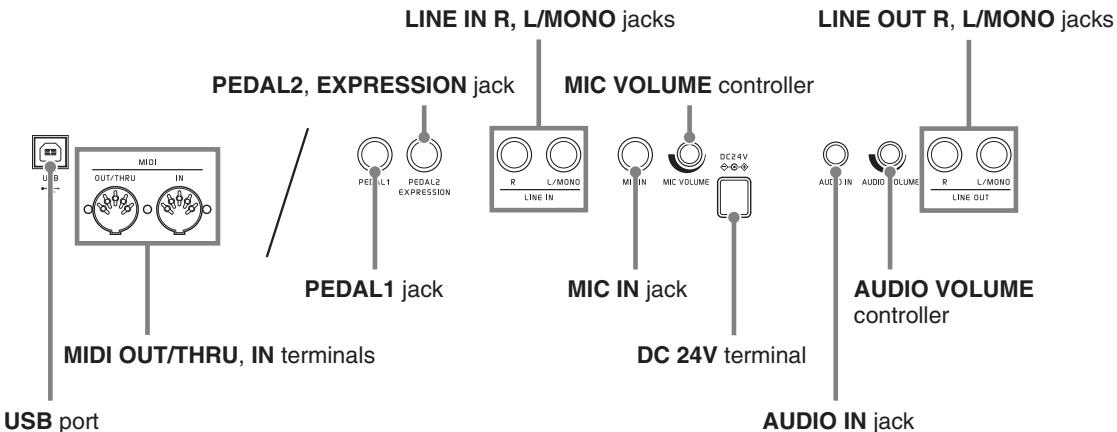
General Guide

- All of the illustrations in this manual show the MZ-X500.
- The actual appearance of the product may be different from that shown in the illustrations in this User's Guide.

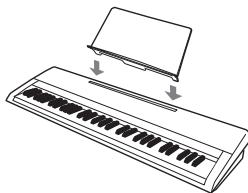


- This manual uses the numbers and names below to refer to buttons and controllers.

1 POWER button	PAD CONTROLLER area (MZ-X300)	
2 VOLUME controller	17 SYNCHRO button	
3 TONE area	18 PHRASE button	
PIANO button	19 SAMPLING button	
ORGAN button	20 BANK \wedge button	
GUITAR/BASS button	21 BANK \vee button	
STRINGS button	22 STOP button	
BRASS/REED/PIPE button	23 Pads 1 to 4	
SYNTH button	DRAWBAR ORGAN/MIXER area	
ETHNIC button	24 SLOW/FAST, PORT buttons	
VARIOUS button	25 PERCUSSION SECOND, 1-8/9-16 button	
4 RHYTHM area	26 PERCUSSION THIRD button	
POPS button	27 Sliders	
ROCK button	RHYTHM CONTROLLER area	
DANCE button	28 INTRO1, 2 buttons	
JAZZ/EUROPEAN button	29 VARIATION/FILL-IN 1 to 4 buttons	
LATIN button	30 BREAK button	
WORLD/VARIOUS button	31 FADE IN/OUT button	
BALLAD button	32 ENDING1, 2 buttons	
PIANO RHYTHMS button	33 SYNCHRO START button	
BEAT area	34 SYNCHRO STOP button	
5 METRONOME button	35 ▶/■ (start/stop) button	
6 TAP TEMPO button	36 ACCOMP ON/OFF button	
7 TEMPO \vee , \wedge buttons	REGISTRATION area	
SETTING area	37 BANK button	
8 TONE button	38 REGISTRATION 1 to 8 buttons	
9 \vee /NO, \wedge /YES buttons	39 STORE button	
10 RHYTHM button	40 FREEZE button	
11 Display	41 REC MODE button	
12 MENU	42 MIDI ▶/■ button	
13 MAIN	43 AUDIO ▶/■ button	
14 EXIT	44 TRANSPOSE \vee , \wedge buttons	
15 VALUE dial	45 OCTAVE \vee , \wedge buttons	
16 K1, K2 knobs	46 SUSTAIN button	
PAD CONTROLLER area (MZ-X500)	47 PITCH BEND wheel	
17 SYNCHRO button	48 MODULATION wheel	
18 PHRASE button	49 USB flash drive port	
19 SAMPLING button	50 PHONES jack	
20 CHORD button		
21 MULTI button		
22 STOP button		
23 Pads 1 to 16		

Back*** Installing the Music Stand**

Insert the bottom of the music stand into the groove on the top of the Digital Keyboard's console.

**LCD Panel**

The liquid crystal panel of the monitor screen uses high-precision technology that provides a pixel yield in excess of 99.99%. This means that some very small number of pixels may not light or may remain lit at all times. This is due to the characteristics of the liquid crystal panel, and does not indicate malfunction.

Returning the Digital Keyboard to Its Factory Default Settings

Perform the following procedure when you want to return the Digital Keyboard's stored data and settings to their initial factory defaults.

1. Turn off the Digital Keyboard.
2. While holding down the **TEMPO** **◀, ▶** buttons, press the **POWER** button.
 - The Digital Keyboard will turn on and initialize its internal system. You will be able to use the Digital Keyboard in a short while.

NOTE

- See "Turning Power On or Off" (page EN-7) for information about turning power on and off.

Separate Tutorial Manual

You can download the separate "Tutorial Manual" and "Appendix"** from the website below.

<http://world.casio.com/>

* Tone and rhythm lists

Power Outlet

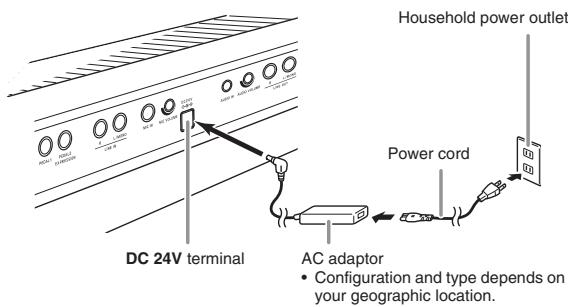
Your Digital Keyboard runs on standard household power. Be sure to turn off power whenever you are not using the Digital Keyboard.

Using an AC Adaptor

Use only the AC adaptor (JEITA Standard, with unified polarity plug) that comes with this Digital Keyboard. Use of a different type of AC adaptor can cause malfunction of the Digital Keyboard.

Specified AC Adaptor: AD-E24250LW

- Use the supplied power cord to connect the AC adaptor as shown in the illustration below.



Note the following important precautions to avoid damage to the power cord.

During Use

- Never pull on the cord with excessive force.
- Never repeatedly pull on the cord.
- Never twist the cord at the base of the plug or connector.

During Movement

- Before moving the Digital Keyboard, be sure to unplug the AC adaptor from the power outlet.

During Storage

- Loop and bundle the power cord, but never wind it around the AC adaptor.

IMPORTANT!

- Never connect the AC adaptor (JEITA Standard, with unified polarity plug) that comes with this Digital Keyboard to any other device besides this Digital Keyboard. Doing so creates the risk of malfunction.
- Make sure the Digital Keyboard is turned off before plugging in or unplugging the AC adaptor.
- The AC adaptor will become warm to the touch after very long use. This is normal and does not indicate malfunction.
- Use the AC adaptor so its label surface is pointed downwards. The AC adaptor becomes prone to emitting electromagnetic waves when the label surface is facing upwards.

Turning Power On or Off

1. Press the 1 button to turn on power.

- Do not touch the keyboard, pedals, or buttons while the startup screen is on the display. Doing so will cause malfunction.



- Use the Digital Keyboard's VOLUME controller (2) to adjust the volume.

2. To turn off the Digital Keyboard, hold down the 1 button until the Digital Keyboard's display goes blank.

IMPORTANT!

- The message shown below may appear while data is being saved to Digital Keyboard memory or immediately after you turn on the Digital Keyboard.

Memory adjusting ...

Please do not power off or unplug your instrument.

Never turn off the Digital Keyboard while this message is displayed.

NOTE

- Pressing the 1 button to turn off power actually puts the Digital Keyboard into a standby state. Minute amounts of current continue to flow within the Digital Keyboard in the standby state. If you do not plan to use the Digital Keyboard for a long time or if there is a lightning storm in your area, be sure to unplug the AC adaptor from the power outlet.

Auto Power Off

This Digital Keyboard is designed to turn off automatically to avoid wasting power after no operation is performed for a preset amount of time. The Auto Power Off trigger time is about four hours.

NOTE

- You can disable Auto Power Off, if you want. For details, see "Auto Power Off" under "SYSTEM SETTING Screen" (page EN-55).

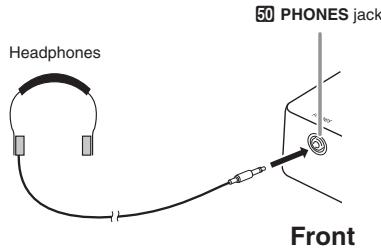
Connections

English

Connecting Headphones

IMPORTANT!

- Before connecting headphones, be sure to use the Digital Keyboard's **2 VOLUME** controller to turn the volume down to a low level. After connecting, you can adjust the volume to the level you want.



Connect headphones to the **PHONES** jack. Connecting headphones to the **PHONES** jack cuts off output to the speakers, which means you can practice even late at night without bothering others. To protect your hearing, make sure that you do not set the volume level too high when using headphones.

NOTE

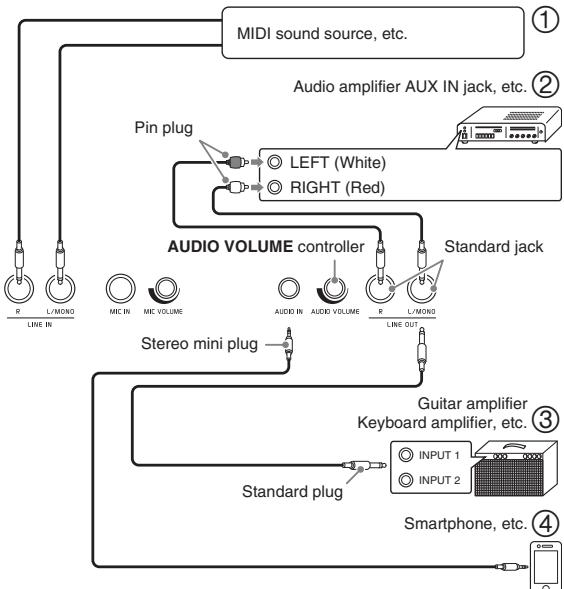
- Be sure to push the headphones plug into the **PHONES** jack as far as it will go. If you don't, you may hear sound from only one side of the headphones.
- If the plug of the headphones you are using does not match the **PHONES** jack, use the applicable commercially available adaptor plug.
- If you are using headphones that require an adaptor plug, make sure you do not leave the adaptor plugged in when you unplug the headphones. If you do, nothing will sound from the speakers when you play.

Connecting Audio Equipment or an Amplifier

You can connect audio equipment or a music amplifier to the Digital Keyboard and then play through external speakers for more powerful volume and better sound quality.

IMPORTANT!

- While sound output from the speakers is disabled,* the Digital Keyboard automatically optimizes sound for headphones and **LINE OUT** listening. During speaker output, it automatically switches to optimization for listening with speakers.
 - Plug inserted into the **PHONES** jack or "Speaker" SYSTEM SETTING Screen (page EN-55) turned off.
- Whenever connecting a device to the Digital Keyboard, first use the **VOLUME** controller to set the volume to a low level. After connecting, you can adjust the volume to the level you want.
- Whenever you connect any device to the Digital Keyboard, be sure to read the user documentation that comes with the device.



Using the Digital Keyboard to Produce Sounds from an External Source (Figures ① and ④)

An external source connected to **LINE IN R** (right) is output from the Digital Keyboard's right speaker, while a source connected to **LINE IN L/MONO** is output from the left speaker. Use commercially available connection cords that match the equipment being connected to. When an external source is connected to **LINE IN L/MONO** only, the input is output from both speakers.

You can connect a smartphone or other music player to **AUDIO IN**.

Use the **AUDIO VOLUME** controller to adjust the volume level of sound input from the **AUDIO IN** terminal. This volume level cannot be adjusted using the **2 VOLUME** controller.

NOTE

- Digital Keyboard built-in effects (reverb, chorus, DSP) are also applied to sound input from the **LINE IN/MIC IN** terminal. **LINE IN/MIC IN** input can be recorded with the Audio Recorder.
- Digital Keyboard built-in effects (reverb, chorus, DSP) are not applied to **AUDIO IN** terminal input. **AUDIO IN** input cannot be recorded with the Audio Recorder.

Connecting to Audio Equipment (Figure ②)

Use commercially available cables to connect the external audio equipment to the Digital Keyboard's **LINE OUT** jacks as shown in Figure ②. **LINE OUT R** jack output is right channel sound, while **LINE OUT L/MONO** jack output is left channel sound. It is up to you to purchase connecting cables like the ones shown in the illustration for connection of audio equipment. Normally in this configuration you must set the audio equipment's input selector to the setting that specifies the terminal (such as **AUX IN**) to which the Digital Keyboard is connected. Use the Digital Keyboard's **VOLUME** controller to adjust the volume level.

Connecting to a Musical Instrument Amplifier (Figure ③)

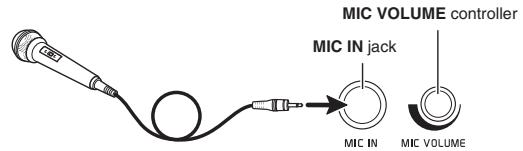
Use commercially available cables to connect the amplifier to the Digital Keyboard's **LINE OUT** jacks as shown in Figure ③. **LINE OUT R** jack output is right channel sound, while **LINE OUT L/MONO** jack output is left channel sound. Connecting to the **LINE OUT L/MONO** jack only outputs a mixture of both channels. It is up to you to purchase a connecting cable like the one shown in the illustration for connection of the amplifier. Use the Digital Keyboard's **VOLUME** controller to adjust the volume level.

Outputting Sound from a Microphone

You can connect an optionally available or commercially available microphone* to the **MIC IN** terminal and output the sound from the microphone thorough the Digital Keyboard's speakers.

* Use a dynamic microphone.

You can adjust the volume level of microphone input with the **MIC VOLUME** controller. Microphone volume control is independent from overall keyboard volume.



IMPORTANT!

- Before connecting a microphone, make sure that the Digital Keyboard and microphone are turned off.
- Before connecting, set both the **VOLUME** and **MIC VOLUME** controllers to low levels. Adjust volume settings to appropriate levels after connecting the microphone.

Bundled and Optional Accessories

Use only accessories that are specified for use with this Digital Keyboard.

Use of unauthorized accessories creates the risk of fire, electric shock, and personal injury.



NOTE

- You can get information about accessories that are sold separately for this product from the CASIO catalog available from your retailer, and from the CASIO website at the following URL.

<http://world.casio.com/>

Operations Common to All Modes

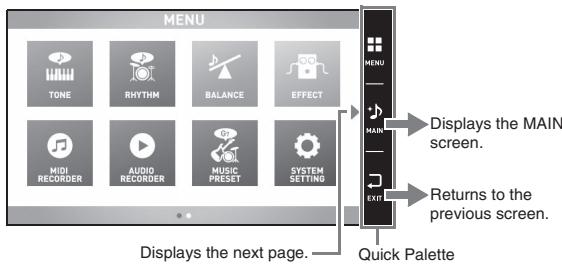
Using the Display Screen

Display Screen Layout

When you turn on the Digital Keyboard, a MENU screen and a MAIN screen (which shows the current setup) appear on the display. You can use these screens to configure a variety of different functions. A quick palette of navigation icons along the right side of the display are for navigating between screens.

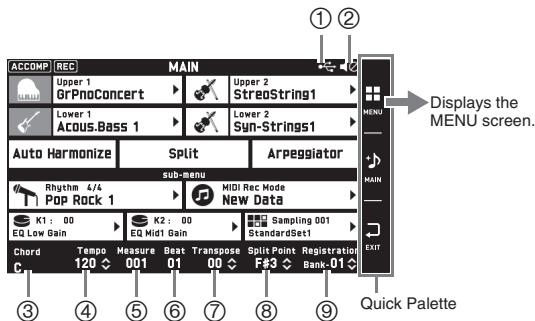
MENU screen

Touching a menu icon displays a screen for configuring tone, rhythm, and other settings.



MAIN screen

The MAIN screen is for checking and modifying main settings. Current settings are shown along the bottom of the screen.



① USB flash drive mounted

② Speakers off

③ Chord

④ Tempo

⑤ Measure

⑥ Beat

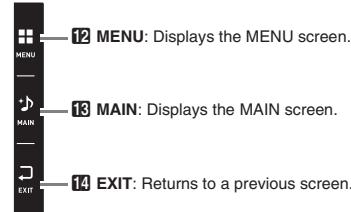
⑦ Transpose

⑧ Split point

⑨ Registration bank

Quick Palette

The Quick Palette is always displayed along the right side of the screen. Touch the Quick Palette icons to navigate between screens.



Screen Contents

You can tell the currently selected items and operation enabled icons by their colors;

Red: Currently selected or turned on
Blue: Operation enabled

All of the screens in this manual show MZ-X500 screens.

Example: Pops groups "16 Beat 1" selected

RHYTHM SELECT						
Group	Name	Group	Name	Group	Name	Group
Pops	Pops	Rock	Dance	Jazz	European	Latin
Pops	036 16 Beat 1	Rock	040 16BtShuffle2	Jazz	041 Slow 16 Beat	Latin
8 Beat	037 16 Beat 2	041 Slow 16 Beat	042 Funk	043 Latin Fusion	World	Various
16 Beat	038 Funk 16 Beat	042 Funk	043 Latin Fusion			
	039 16BtShuffle1					

Goes to the next group.

Goes to the previous or next page.

IMPORTANT!

- The meanings of symbols that appear after data is recorded or edited are explained below.

! : Unsaved data

*: Saved data

Unsaved data (!) will be discarded if you exit the editing or recording operation by selecting a different number. If you do not want edited data to be discarded, be sure to save it before doing anything else.

Performing Operations

To use the touch panel

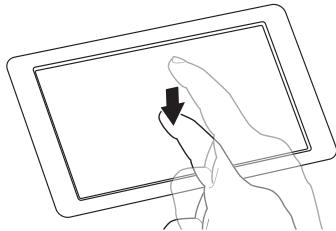
Your Digital Keyboard has a touch panel. You can use the touch panel to configure a variety of different functions.

IMPORTANT!

- Do not perform touch panel operations with a sharp or hard pointed object. Doing so can damage the LCD.

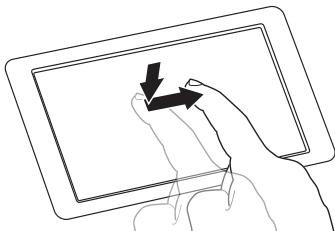
Touch

Press the display lightly with your finger.



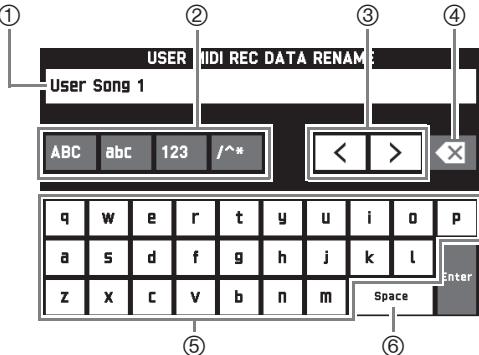
Swipe

Swipe the display from left to right with your finger. Swiping a MENU screen changes to another page of menu items.



To input text characters

You can touch the keys of an on-screen touch keyboard to input data file names. The Digital Keyboard supports input of alpha characters and symbols.

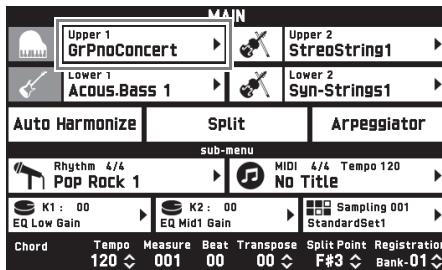


- ① Shows the letters you input.
- ② Selects the character type.
- ③ Moves the cursor forward and back.
- ④ Deletes the letter to the left at the cursor.
- ⑤ Input letters at the cursor position.
- ⑥ Inputs a space at the cursor position.

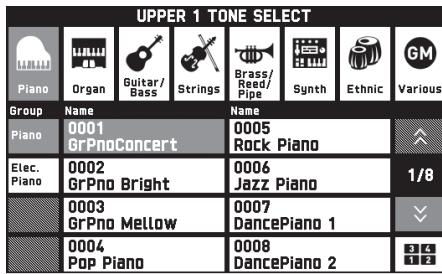
To select an item in a list

An item that can be selected using a list is indicated by the “▶” icon.

- Touch the item whose setting you want to change.



- On the list that appears, touch the item to which you want to change.

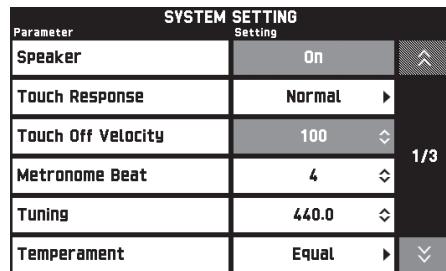


To change a setting value

A setting value that can be changed is indicated by a “▽” icon. You can use either of the two procedures below to change a setting value.

To change a setting value using buttons or a dial operation

- Touch the item whose setting you want to change.



- Use the **15 VALUE** dial or the **9 ▽/NO, ▲/YES** buttons to change setting value.

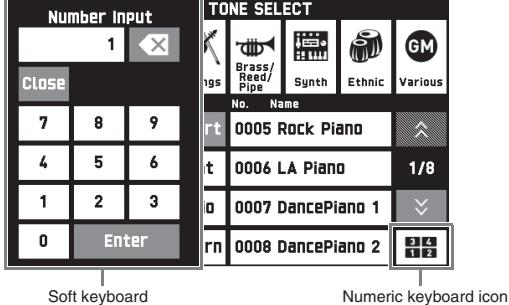
- Holding down either of the **9 ▽/NO, ▲/YES** buttons scrolls through values at high speed.
- Pressing the **9 ▽/NO, ▲/YES** buttons at the same time returns the setting to its initial default.



■ Performing Screen Operations

1. Touch the item whose setting you want to change to select it.
2. Touch the numeric input icon.

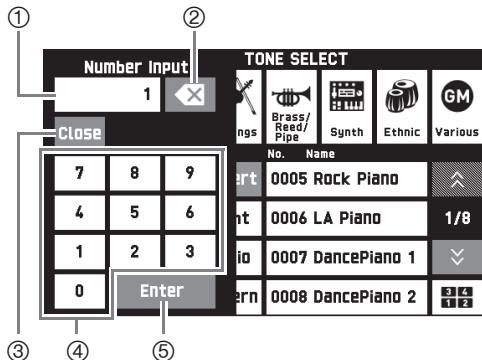
This causes a soft keyboard to appear on the display.



Soft keyboard

Numeric keyboard icon

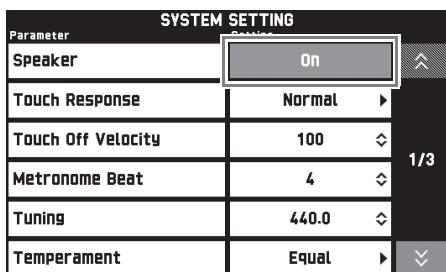
3. Use the soft keyboard to input numbers.



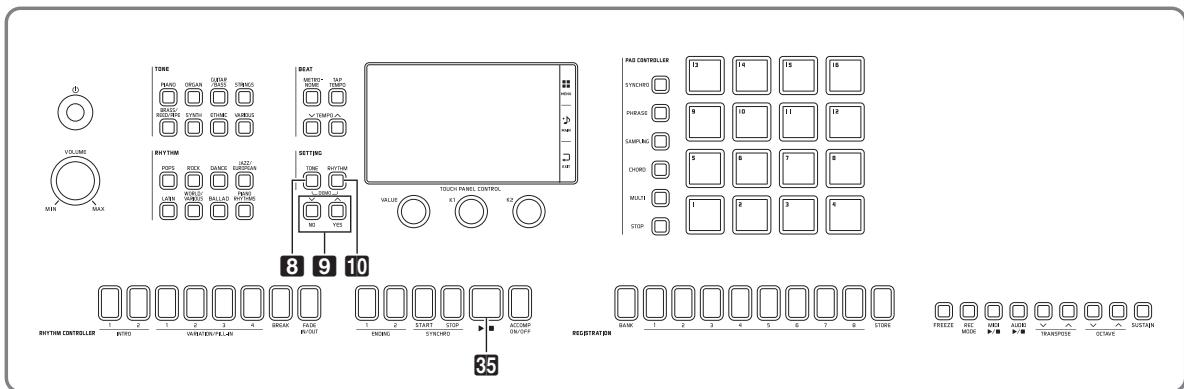
- ① Shows the value you input.
- ② Touch to delete an input value.
- ③ Touch to close the value input window.
- ④ Touch to input numbers.
- ⑤ Touch to register an input value.

To toggle a function on or off

To toggle a function between on or off, touch its item or icon.



Demo Song



Playing the Demo Tunes

1. Press the **8 TONE** button and **10 RHYTHM** button at the same time.

This will start sequential playback of the demo songs, starting from song 1.

- You can use the **9 ▼/NO, ▲/YES** buttons to change to another demo song.



2. Press the **35 ▶/■** button.

This stops demo song playback.

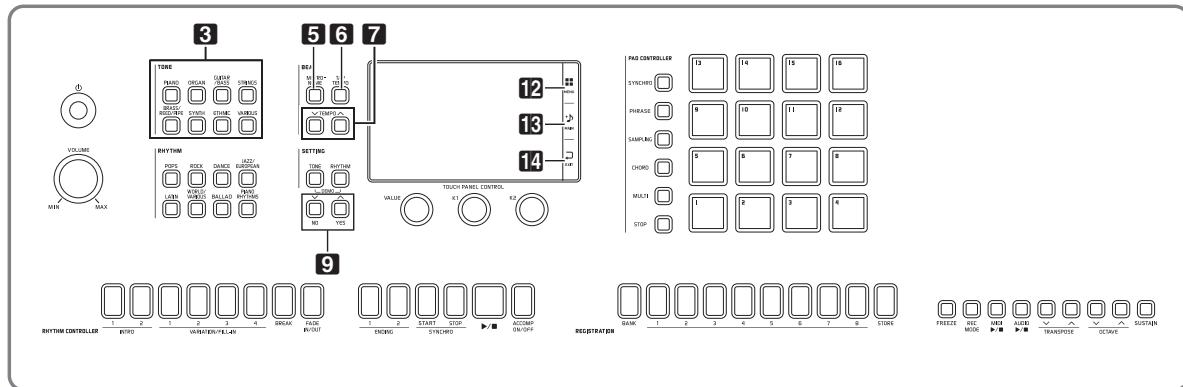
Playback of the demo songs will continue in an endless loop until you press the **35 ▶/■** button to stop it.

NOTE

- Only the operations described above can be performed while demo song playback is in progress.

Playing with Different Tones

English



Your Digital Keyboard comes with a large collection of tones. You can select a tone and play it on the keyboard.

- Refer to the separate “Appendix” for details about tones.

Selecting a Tone with the TONE Buttons

- In the **3 TONE** area, press the button of the tone group that contains the tone you want.
 - This will display the tone group on the **UPPER 1 TONE SELECT** screen.
 - Touching the subgroup icon displays subgroup tones.
 - To select a part and change its tone setting, touch “Select” on the TONE screen before performing the above operation, and then select a part (Upper 1, Lower 1, etc.) For details, see the separate “Tutorial” manual.
 - You can display the **UPPER 1 TONE SELECT** screen from any other screen by pressing a button in the **3 TONE** area.
 - On the **MAIN** screen, you can touch “Upper 1” and then use the **UPPER 1 TONE SELECT** screen to select a tone.

Subgroup

UPPER 1 TONE SELECT							
Group	Name	Name					
Piano	0001 GrPnoConcert	0005 Rock Piano					
Elec. Piano	0002 GrPno Bright	0006 Jazz Piano	1/8				
	0003 GrPno Mellow	0007 DancePiano 1					
	0004 Pop Piano	0008 DancePiano 2					

2. Touch the tone you want to use.

- You can navigate between tone group pages by touching “” or “”.

NOTE

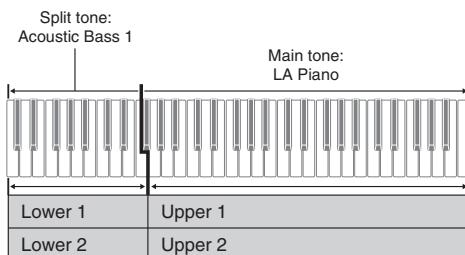
- If you touch the Upper 1 icon to turn it off, nothing will sound when you press a keyboard key.

Splitting the Keyboard between Two Tones

You can split the keyboard so the left side (lower range) plays one tone and the right side (upper range) plays a different tone.

- On a split keyboard, a tone assigned to the low range is called a “split tone” (Lower 1).

Example: “LA Piano” is selected for the main tone, and “Acoustic Bass 1” is selected for the split tone



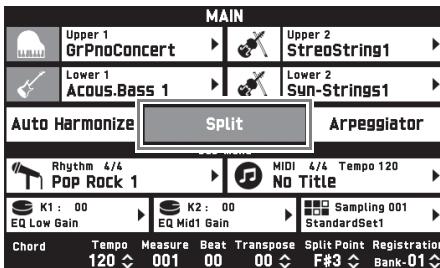
1. On the screen, touch **13 MAIN**.

This displays the **MAIN** screen.

2. Touch “Upper 1” and then select the main tone.

3. On the MAIN screen, touch “Split”.

This turns on split.



4. Touch “Lower 1”.

This displays the TONE SELECT screen.

5. Touch the group that contains the tone you want to use as the split tone.

- Use the tone group buttons in the **3 TONE** area to select the tone group you want.

6. Touch the tone you want to use as the split tone.

7. On the screen, touch **13 MAIN** to return to the MAIN screen.

8. To unsplit the keyboard and return it to a single tone, touch “Split” on the MAIN screen.

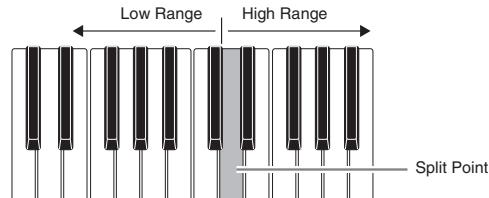
This unsplits the keyboard.

NOTE

- You can layer both the main tone and the split tone with another by turning on layer (page EN-19). You can also configure the layer setting after turning on the split.
- Turning off Upper 1, Upper 2, Lower 1, or Lower 2 by touching its icon will mute the applicable tone.
- When tones with DSP are assigned as both the main tone and the split tone, the effect of one of the tones becomes disabled.
- If you use the **3 TONE** area buttons to select a tone group, you can specify whether you want to directly select tones of the Upper 1 and 2, the Lower 1 and 2, and other parts. For details, see “TONE Screen” under “Configuring Digital Keyboard Settings” (page EN-50).

To move the keyboard split point

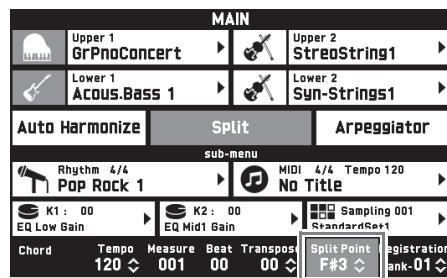
You can use the procedure below to specify the location on the keyboard where it splits between the left side and the right side. That location is called the “split point”.



1. On the screen, touch **13 MAIN**.

This displays the MAIN screen.

2. Touch “Split Point”.



3. Use the **9 ▼/NO, ▲/YES** buttons to specify the split point, which is the leftmost key of the upper range.

- You can also specify the split point by touching and holding “Split Point” as you press the desired keyboard key.

NOTE

- You can also turn each part (Upper 1, 2 and Lower 1, 2) on or off, and change the range of each part. For details, see “TONE Screen” under “Configuring Digital Keyboard Settings” (page EN-50).

Layering Two Tones

You can layer two different tones so they play at the same time when you press a keyboard key.

- The Upper 1 tone is called the “main tone”, while the Upper 2 tone is called the “layered tone”.

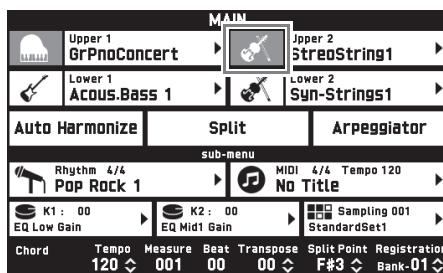
- On the screen, touch **13 MAIN**.

This displays the MAIN screen.

- Select the main tone.

- Touch the Upper 2 icon.

This turns on layer and layers the two tones.



- Touch the “Upper 2” tone.

This displays the TONE SELECT screen.

- Touch the group that contains the tone you want to use as the layer tone.

- Touch the tone you want to use as the layer tone.

- On the screen, touch **13 MAIN** to return to the MAIN screen.

- To unlayer the keyboard and return to a single tone, touch the Upper 2 icon on the MAIN screen.

This unlayers the tones.

NOTE

- You can adjust the balance between the main tone and layered tone.
See “Adjusting the Keyboard Volume Balance” (page EN-19).
- Touching the Upper 1 or Upper 2 icon will turn off the applicable tone so it does not sound.
- When tones with DSP are assigned as both the main tone and the layered tone, the effect of one of the tones becomes disabled.

Adjusting the Keyboard Volume Balance

Use this procedure to adjust the volume balance between the main tone and the layered tone.

- On the screen, touch **12 MENU**.

This displays the MENU screen.

- Touch “BALANCE”.

- Touch the tone you want to adjust and then use the **9 ▼/NO, ▲/YES** buttons to adjust volume.

Upper 1: Main tone

Upper 2: Layered tone

Lower 1: Split (main) tone

Lower 2: Split (layered) tone

- On the screen, touch **13 MAIN** to return to the MAIN screen.

NOTE

- For other BALANCE screen settings, see “BALANCE Screen” under “Configuring Digital Keyboard Settings” (page EN-52).

Using the Metronome

- Press the **5 METRONOME** button.

This starts the metronome.

Flashes in time with the beat.



- Press the **5 METRONOME** button again to stop the metronome.

This stops the metronome.

To change the beats per measure

You can specify from 0 to nine beats per measure for the metronome.

Specifying 0 will cause each beat to be indicated by the same sound. This setting lets you practice with a steady beat.

1. On the MENU screen, touch “SYSTEM SETTING”.
2. Touch “Metronome Beat”.
3. Use the **9** ▼/NO, ▲/YES buttons to select a beats per measure value.
4. On the screen, touch **13 MAIN**.

This returns to the MAIN screen.

Adjusting the Balance between Metronome and Keyboard Volume (Metronome Volume)

You can use the following procedure to adjust the volume level of the metronome, without affecting the volume of keyboard output.

1. On the screen, touch **12 MENU**.
This displays the MENU screen.
2. Touch “BALANCE”.
3. Touch “Metronome Volume”.
4. Use the **9** ▼/NO, ▲/YES buttons to adjust the metronome volume setting (0 to 127).

5. On the screen, touch **13 MAIN**.

This returns to the MAIN screen.

Changing the Tempo Setting

There are two different methods you can use to change the tempo setting: using the **7 TEMPO ▼, ▲** buttons for gradual change, or by tapping a beat with the **6 TAP TEMPO** button (tap input).

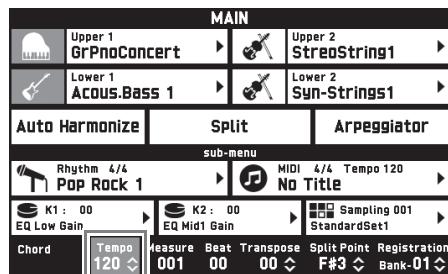
■ Method 1:

To adjust the tempo setting using the **7 TEMPO ▼, ▲** buttons

1. Use the **7 TEMPO ▼, ▲** buttons to adjust the tempo setting.

Each press of a button increases or decreases the tempo value (beats per minute) by one.

- Holding down either button changes the value at high speed.
- You can specify a tempo value in the range of 20 to 255.

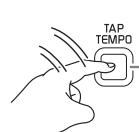


■ Method 2:

To adjust the tempo by tapping a beat (tap input)

1. Tap the **6 TAP TEMPO** button a number of times at the tempo you want to set.
The tempo setting will change in accordance with your tapping.

Tap two or more times.



- After you use this method to specify the approximate tempo, you can then use the procedure under “To adjust the tempo setting using the **7 TEMPO ▼, ▲** buttons” to adjust the setting to a more exact value.

Sounding Arpeggio Phrases Automatically (Arpeggiator)

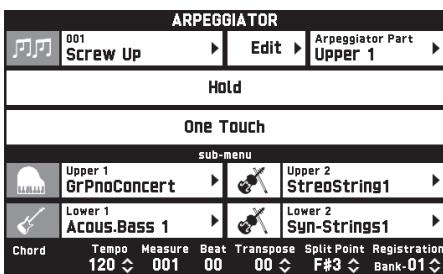
With the arpeggiator, you can play various arpeggios and other phrases automatically by simply pressing keys on the keyboard. You can select from a number of different arpeggio options, including playing arpeggios from a chord, playing various phrases automatically, and more.

- On the MENU screen, touch “ARPEGGIATOR”.

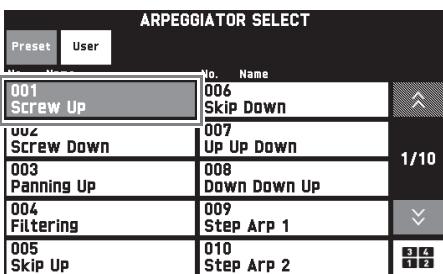
This displays the ARPEGGIATOR screen.

- To enable the arpeggiator, touch “”.

- You can also toggle the arpeggiator between on and off by touching “Arpeggiator” on the MAIN screen.



- Touch the displayed arpeggio name.



- Touch the arpeggiator type you want to use.
- Touch **14 EXIT** to return to the ARPEGGIATOR screen.

- Configure arpeggiator settings as required.

Item	Description	Setting
Arpeggiator Part	You can specify either Upper or Lower as the keyboard that plays the arpeggio.	Upper All, Upper 1, Upper 2, Lower All, Lower 1, Lower 2
Hold	ON: The arpeggio will continue to play even after keyboard keys are released. OFF: The arpeggio will play while keyboard keys are pressed.	
One Touch	Touching “One Touch” automatically selects the tone recommended for the currently selected arpeggiator type. The tone is assigned to the part selected by Arpeggiator Part.	

- On the keyboard, play a chord or a single note.

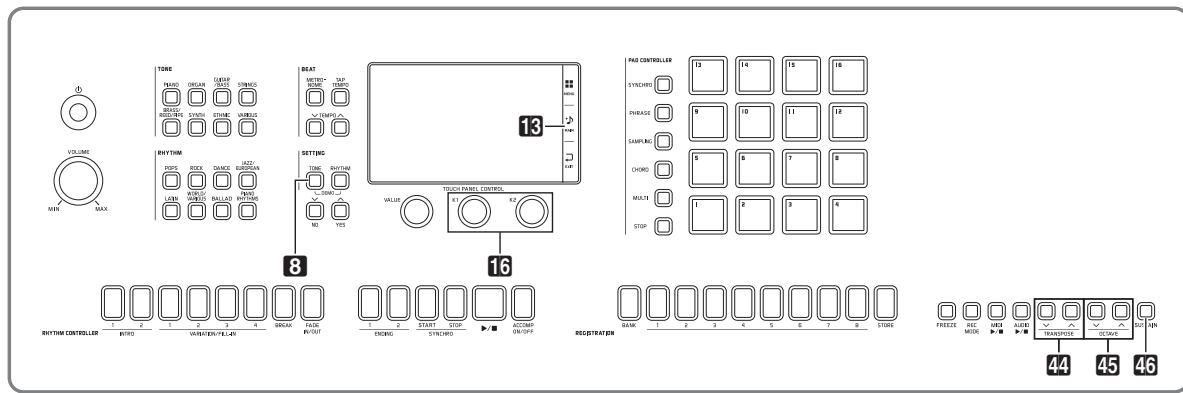
Arpeggio is played in accordance with the currently selected arpeggiator type and the note(s) you play.

- To disable the arpeggiator, touch “”.

NOTE

- You can edit an arpeggio phrase as desired. For details, see the separate “Tutorial” manual.

Controlling Sounds



Using a Pedal

Connecting a pedal lets you perform pedal operations that add various effects during your performances. Some representative effects are described below. You can also assign a variety of other functions to the pedal. For details, see “CONTROLLER Screen” under “Configuring Digital Keyboard Settings” (page EN-56).

● Damper Pedal

Pressing the damper pedal while playing will cause the notes you play to reverberate.

● Soft Pedal

Pressing this pedal suppresses notes played on the keyboard after the pedal was pressed, and makes them sound softer.

● Sostenuto Pedal

Only the notes of the keys that are depressed when this pedal is pressed are sustained, even if the keyboard keys are released, until the pedal is released.

● Expression Pedal

You can use a pedal to control the volume level and effect application.

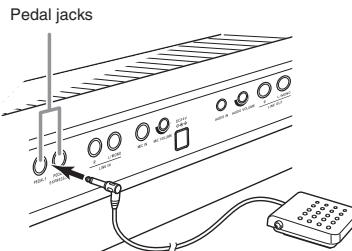
Connecting a Pedal

Your Digital Keyboard has two pedal jacks.

■ To connect to the pedal jack

Depending on the type of operation you want the pedal to perform, connect the pedal’s cable either to the Digital Keyboard’s **PEDAL1** jack or **PEDAL2/EXPRESSON** jack.

Back



IMPORTANT!

- Use a commercially available expression pedal that meets the specifications below.* Note that the polarity of the pedals of some manufacturers is different from the polarity required by this Digital Keyboard.

* Operation has been verified for the pedals below.
Roland EV-5 (Set minimum volume to “0”).
KURZWEIL CC-1
FATAR VP-25, VP-26



Sustaining Notes

You can sustain notes producing the same effect as that produced by pressing a sustain pedal.

1. While playing, press the **46 SUSTAIN** button.

This causes the button lamp to light.

- The sustain effect (note sustained even after its keyboard key is released) is applied to notes played on the keyboard while the lamp is lit.



- You can change the part to which the effect is applied when you press the **46 SUSTAIN** button. Before pressing the **46 SUSTAIN** button in the step above, touch "Advanced" on the SYSTEM SETTING screen, and then select Upper 1 or Lower 1 for the "Sustain Button Target" setting. For details, see the separate "Tutorial" manual.

Using the Pitch Bend Wheel

You can use the pitch bend wheel to slide the pitch of notes smoothly upwards and downwards. This capability makes it possible to reproduce saxophone and electric guitar choking effects.

1. While playing a note on the keyboard, rotate the **47 PITCH BEND** wheel on the left of the keyboard upwards or downwards.

The amount the note bends depends on how much you rotate the pitch bend wheel.

- Do not touch the pitch bend wheel as you turn on the Digital Keyboard.



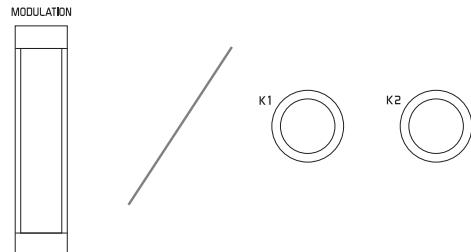
Modifying Notes with the Modulation Wheel and/or Knobs

You can modify notes even while you are playing. Each tone is preset with effects that are appropriate for it.

1. While playing on the keyboard with your right hand, use your left hand to operate the **48 MODULATION** wheel or the **16 K1** or **K2** knobs.

The amount effect applied depends on how much the applicable control is moved.

- Do not touch the wheel or knobs as you turn on the Digital Keyboard.



NOTE

- You can change the effects and functions assigned to the modulation wheel and knobs. See "CONTROLLER Screen" under "Configuring Digital Keyboard Settings" (page EN-56).

NOTE

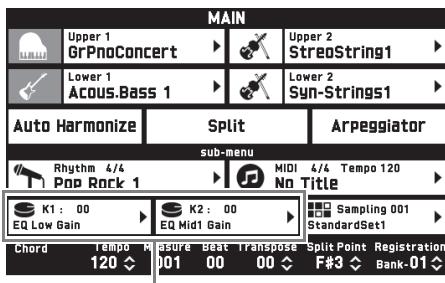
- You also can configure pitch bend wheel operation by specifying the amount of pitch change at maximum rotation in either direction. See "CONTROLLER Screen" (page EN-56) for more information.

To change a function assigned to a knob

- On the screen, touch **13 MAIN**.

This displays the MAIN screen.

- On the MAIN screen, touch the knob whose setting you want to change.



Current setting, Assigned target

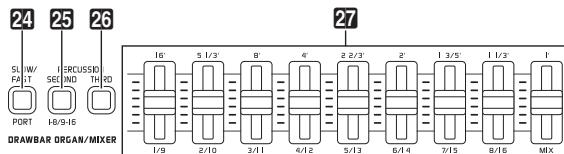
- Change the setting.

For detailed information about settings, see "CONTROLLER Screen" under "Configuring Digital Keyboard Settings" (page EN-56).

NOTE

- Two targets can be assigned to a knob. When there are two targets assigned to a knob, the display shows the first target and its setting.
- When there is a control change (CC) or other MIDI message that can be assigned to each part assigned to the first target, the display shows the setting of Part 1.

Using the Sliders



You can use the nine sliders (27) for easy adjustment of the volume balance and some tone parameters of the variety of sounds that make up the tones below.

- Drawbar Organ Tones:
Volume of each harmonic overtone
 - Hex Layer Tones (MZ-X500 only):*
Volume of each of the six component tones
- * A Hex Layer Tone is a rich ensemble tone created by layering up to six tones. Hex Layer Tones are included in the Hex Layer group and Bass Synth group on the TONE SELECT screen.

Adjusting Drawbar Organ Tones

Your Digital Keyboard comes with a built-in virtual wheel drawbar organ function that lets you modify tones just as you would on a drawbar organ. The nine sliders, which correspond to drawbars, can be used to change harmonic overtone level settings, and to add percussion and click sounds for real-time sound creation as you play.

- 24 SLOW/FAST button:**

Switches the rotary effect rotation speed.

- 25 PERCUSSION SECOND,**

- 26 PERCUSSION THIRD buttons:**

Adds 2nd overtone or 3rd overtone percussion to the drawbar organ for metallic sound with a strong attack.

- In the Drawbar Organ group, select the tone you want.
- Shift the sliders upwards and downwards to adjust the feet settings.

Using the Mixer

The sound source of this Digital Keyboard is capable of sounding multiple parts simultaneously. Each part can be controlled individually, and each part can be assigned a different tone.

The mixer can be used to assign tones and to configure other settings for each part, to configure global effect settings applied to all parts, and to configure other detailed settings.

1. On the MENU screen, touch “MIXER”.

This displays the MIXER screen.

2. Press the **24 PORT** button to select port A, B, or C.

- You can also select a port by touching “PORT” on the screen. For details about ports, see the separate “Tutorial” manual.

3. Use the **25 1-8/9-16** button to select which group of eight parts (01 through 08, or 09 through 16) whose settings you want to configure.

- Each press of the **25 1-8/9-16** button toggles the selection between parts 01 through 08 (The button is unlit) and parts 09 through 16 (The button is lit).
- Buttons for four of the parts in the group you select will appear along the top of the MIXER screen.
- Parts 01 through 08 can be modified while the **25 1-8/9-16** button lamp is unlit, while parts 09 through 16 tones can be modified while the lamp is lit.

4. Shift the **27** sliders to change the setting of the corresponding part.

The **MIX** slider on the far right changes the settings of all the parameters.

- For information about parameters that can be modified on the MIXER screen, see “MIXER Screen” under “Configuring Digital Keyboard Settings” (page EN-57).

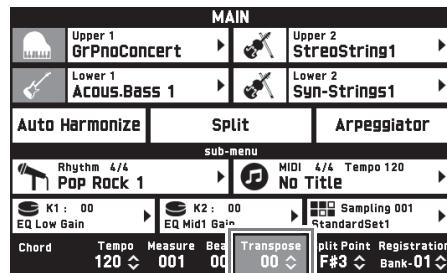
Changing the Pitch of Notes (Transpose, Octave Shift)

Transposing the Keyboard Semitone Units

The transpose feature lets you raise or lower the overall pitch of the Digital Keyboard in semitone steps. You can use this feature to adjust keyboard tuning to a key that better matches a vocalist, another musical instrument, etc.

1. Use the **44 TRANSPOSE** **▼**, **▲** buttons to change the setting value.

- You can change the tuning of the keyboard within the range of -12 to 00 to +12.
- Pressing the **44 TRANSPOSE** **▼**, **▲** buttons at the same time changes the setting to 0.
- The current transpose setting is shown on the MAIN screen.



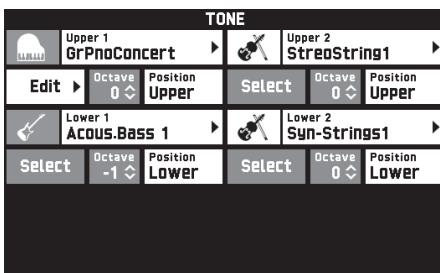
NOTE

- For information about tuning the pitch in Hertz units, see “SYSTEM SETTING Screen” under “Configuring Digital Keyboard Settings” (page EN-55).

Changing the Pitch in Octave Units (Octave Shift)

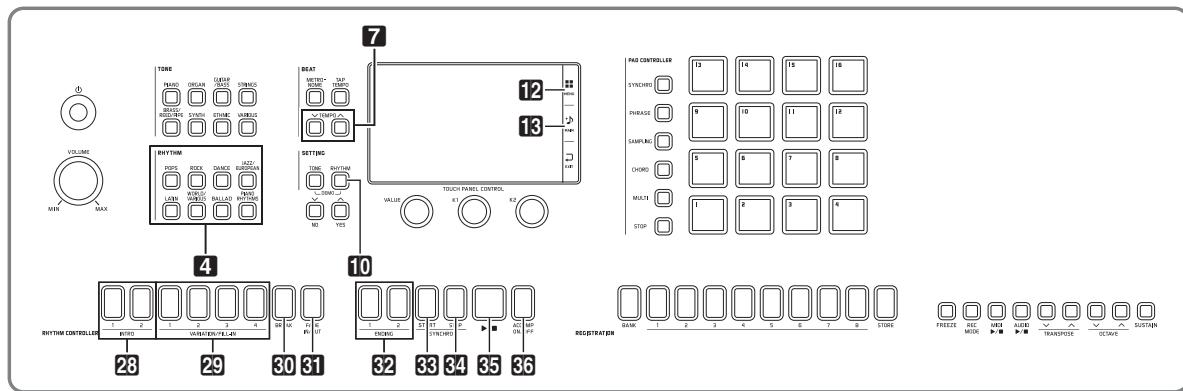
You can change the pitch of the keyboard in octave units. This comes in handy when playing music that exceeds the range of the keyboard.

1. Use the **45 OCTAVE ▼, ▲** buttons to change the keyboard pitch in octave units.
 - The setting range for this operation is ±3 (-3 octaves to +3 octaves).
 - You can check the current pitch setting on the TONE screen, which is displayed by pressing the **8 TONE** button in the SETTING area.
 - Pressing the **45 OCTAVE ▼, ▲** buttons at the same time returns the pitch to its initial factory default setting.
 - To select a part and change its pitch setting, touch "Advanced" on the SYSTEM SETTING screen before performing the above operation, and then use "Octave Button Target" to select a part (Upper 1, Lower 1, etc.) For details, see the separate "Tutorial" manual.



Using Auto Accompaniment

English



With Auto Accompaniment, simply select the accompaniment rhythm you want and the matching accompaniment (drums, guitar, etc.) will play automatically when you play a chord with your left hand. It's like having your own personal backup group along with you wherever you go.

You can edit built-in rhythms and produce original rhythms (user rhythms) and save them in memory. For details, see the separate "Tutorial" manual.

Playing an Auto Accompaniment

- In the **4 RHYTHM** area, press the button of the rhythm group that contains the rhythm you want.

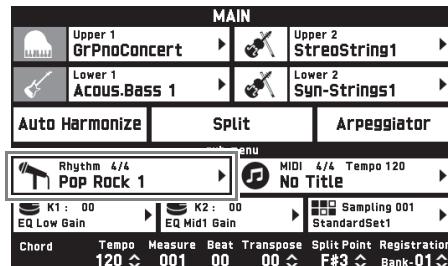
The RHYTHM SELECT screen will appear with a list of rhythms in the selected rhythm group.

- Touching the subgroup icon displays subgroup rhythms.
- You can display the RHYTHM SELECT screen from any other screen by pressing a button in the **4 RHYTHM** area.



- Touch the rhythm you want to use.

- You can navigate between rhythm group pages by touching "▲" or "▼".
- You can also display the RHYTHM SELECT screen by touching the rhythm name displayed for "Rhythm" on the MAIN screen.



- Use the **7 TEMPO ▼, ▲** buttons to adjust the tempo setting.

- For information about the tempo adjustment method, see "Changing the Tempo Setting" (page EN-20).
- To return a rhythm to its recommended tempo setting, press the **7 TEMPO ▼, ▲** buttons at the same time.

- Press the **36 ACCOMP ON/OFF** button so its lamp is lit.

This turns ACCOMP on, so all accompaniment parts sound.

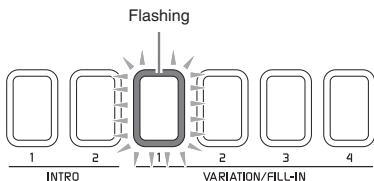
- Turning ACCOMP off so the ACCOMP lamp is unlit causes only the percussion instrument parts (Drums, Percussion) to sound.
- Each press of the button toggles ACCOMP between on and off.



5. Press the **33 SYNCHRO START** button.

This puts Auto Accompaniment into “synchro standby”. Playing a chord during synchro standby will cause Auto Accompaniment to start to play automatically.

- Next, pressing an **28 INTRO 1, 2** button or a **29 VARIATION/FILL-IN 1 to 4** button will enter intro or variation standby. For details about intro and variation patterns, see “Modifying Auto Accompaniment Patterns” (page EN-30).



NOTE

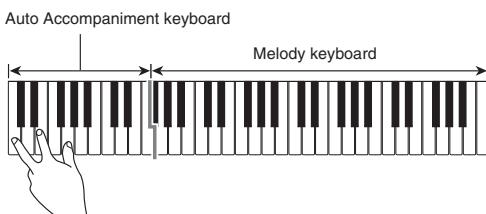
- You can adjust the volume level of the Auto Accompaniment, without affecting the volume of Digital Keyboard output. For details, see “BALANCE Screen” (page EN-52).
- You can change the size of the Auto Accompaniment keyboard using the split function to move the split point (page EN-18). The keyboard keys to the left of the split point are the Auto Accompaniment keyboard.

6. Play a chord on the Auto Accompaniment keyboard (left-side keyboard).

Auto Accompaniment will start playing when you play the chord.

- To start percussion part play without playing a chord, press the **35 ▶/■** button.

Example: To play a C chord



7. Play other chords with your left hand as you play the melody with your right hand.

- You can use “CASIO Chord” or other simplified chord fingering modes to play chords. For details, see “To select a chord fingering mode” in the following section.
- You can also modify Auto Accompaniment patterns using the **29 VARIATION/FILL-IN 1 to 4** buttons, the **30 BREAK** button, and the **31 FADE IN/OUT** button. For details, see “Modifying Auto Accompaniment Patterns” (page EN-30).

8. When you are finished, press the **35 ▶/■** button to stop Auto Accompaniment.

- Pressing the **32 ENDING 1, 2** button instead of the **35 ▶/■** button will play an ending pattern before stopping Auto Accompaniment play. For details about ending patterns, see “Modifying Auto Accompaniment Patterns” (page EN-30).

To select a chord fingering mode

You can select from among the following five chord fingering modes.

- Fingered 1
- Fingered 2
- Fingered 3
- CASIO Chord
- Full Range

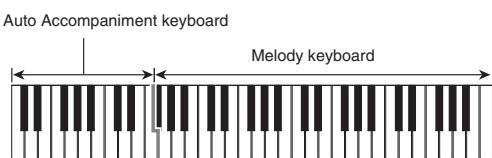
1. On the MENU screen, touch “RHYTHM”.
2. Touch “Chord Input Type”.
3. Touch the chord input method you want to use.

This changes to the selected chord input method.

■ Fingered 1, 2, 3

With these three chord fingering modes, you play chords on the chord keyboard using their normal chord fingerings. Some chord forms are abbreviated, and can be fingered with one or two keys.

For information about the types of chords you can finger and their fingerings, see the “Fingering Guide” (page A-1).



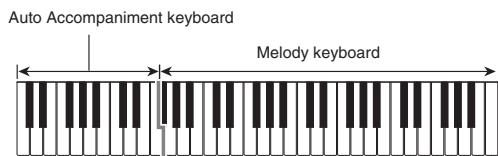
Fingered 1: Play the component notes of the chord on the keyboard.

Fingered 2: Unlike Fingered 1, 6th input is not possible with this mode.

Fingered 3: Unlike Fingered 1, this mode allows input of fraction chords with the lowest keyboard note as the bass note.

■ CASIO CHORD

With “CASIO Chord”, you can use simplified fingerings to play the four types of chords described below.

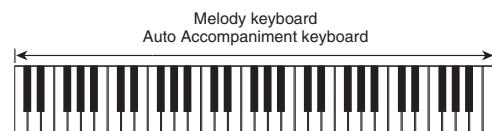


Chord Type	Example
Major Chords Press one key, whose note corresponds to the chord name. <ul style="list-style-type: none"> • To play C Major, press any C key in the chord keyboard. The octave of the note does not matter. 	C (C Major) Note name ↗
Minor Chords Press the chord keyboard key that corresponds to the major chord, while also pressing one other chord keyboard key to the right.	Cm (C minor)
Seventh Chords Press the chord keyboard key that corresponds to the major chord, while also pressing two other chord keyboard keys to the right.	C7 (C seventh)
Minor Seventh Chords Press the chord keyboard key that corresponds to the major chord, while also pressing three other chord keyboard keys to the right.	Cm7 (C minor seventh)

When pressing more than one chord keyboard key, makes no difference whether the additional keys are white or black.

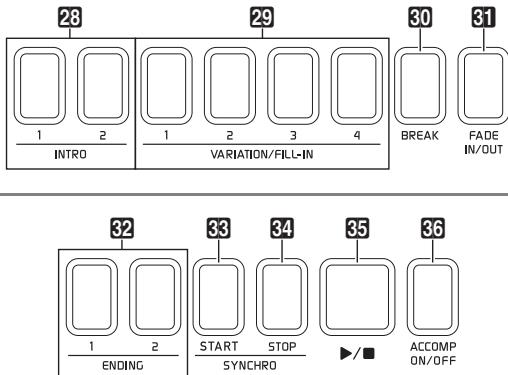
■ FULL RANGE CHORD

With this chord fingering mode, you can use the full range of the keyboard to play chords and the melody. For information about the types of chords you can finger and their fingerings, see the “Fingering Guide” (page A-1).



Modifying Auto Accompaniment Patterns

The different types of Auto Accompaniment phrases (patterns) are shown in the illustration below. You can switch between patterns during accompaniment play and even modify patterns.



28 INTRO 1, 2 buttons:

Press at the beginning of a song. Two intro patterns are provided. Auto Accompaniment normally proceeds to Variation 1 automatically after the intro pattern is complete. If you press a different variation button before pressing an intro button, Auto Accompaniment will proceed to the selected variation after the intro pattern is complete.

29 VARIATION/FILL-IN 1 to 4 buttons:

The Digital Keyboard has four built-in rhythm variations. Pressing the same button again while its variation pattern is sounding will play a fill-in pattern that momentarily modifies the rhythm.

30 BREAK button:

Inserts an interval of silence into an Auto Accompaniment that is playing. Pressing this button while Auto Accompaniment is playing will stop Auto Accompaniment until the beginning of the next measure. From there, Auto Accompaniment play returns to normal.

31 FADE IN/OUT button:

- **FADE IN:** Gradually increases volume as Auto Accompaniment starts. If Auto Accompaniment is not playing, pressing this button causes the button to light. Next, pressing a **28 INTRO 1, 2, 33 SYNCHRO START, 34 SYNCHRO STOP, or 29 VARIATION/FILL-IN 1 to 4** button starts Auto Accompaniment play as the volume level is raised. The button lamp becomes unlit when the volume reaches normal level.
- **FADE OUT:** Gradually decreases volume as Auto Accompaniment ends. If Auto Accompaniment is playing, pressing this button causes the button to light, and volume is gradually decreased as Auto Accompaniment ends. The button lamp becomes unlit when Auto Accompaniment ends.

NOTE

- FADE IN and FADE OUT also affect not only Auto Accompaniment, but also the volume of notes played on the keyboard.

32 ENDING 1, 2 buttons:

These buttons sound an ending rhythm pattern at the end of a song. Two ending patterns are provided.

33 SYNCHRO START button:

While this button is lit, Auto Accompaniment will start when you play a chord on the keyboard.

34 SYNCHRO STOP button:

While this button is lit, Auto Accompaniment and rhythm stop simultaneously when Auto Accompaniment keyboard keys are released. The **33 SYNCHRO START** button automatically lights after Auto Accompaniment is complete.

- For details about other rhythm settings, see “RHYTHM Screen” under “Configuring Digital Keyboard Settings” (page EN-51).

Using Recommended Tones and Tempos (One-Touch Presets)

One-Touch Preset gives you one-touch access to tone and tempo settings that go well with the currently selected Auto Accompaniment rhythm pattern.

1. On the MENU screen, touch “RHYTHM”.

This displays the RHYTHM screen.

- You can also display the RHYTHM screen by pressing the **10 RHYTHM** button.

2. Touch “One Touch”.

This configures tone, tempo, and other settings to match the currently selected rhythm pattern.

At this time, Auto Accompaniment play also will go into synchro standby, which means that Auto Accompaniment will start to play automatically when you finger a chord.

3. Play a chord on the keyboard.

This will start Auto Accompaniment play.

NOTE

- One-Touch Presets are not supported for user rhythms. For information about user rhythms, see the separate “Tutorial” manual.

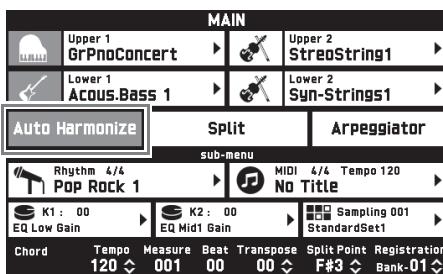
Adding Harmony to Melody Notes (Auto Harmonize)

Auto Harmonize lets you add harmony to melody notes you play with your right hand for more melodic depth. You can select any one of 12 Auto Harmonize types.

1. On the screen, touch **13 MAIN**.

This displays the MAIN screen.

2. Touch “Auto Harmonize” to turn it on.



3. Touch **12 MENU**.

4. On the MENU screen, touch “RHYTHM”.

5. Touch “Auto Harmonize Type”.

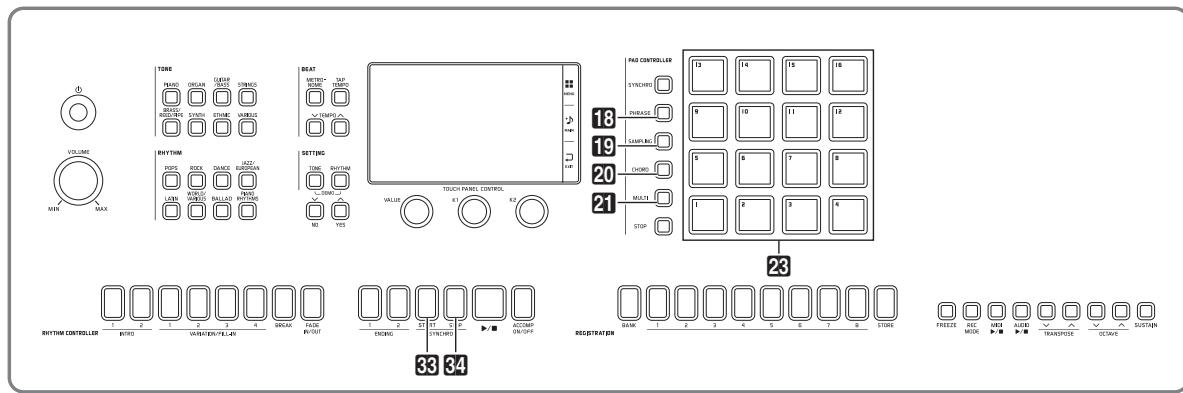
6. Touch the Auto Harmonize type you want to use.

Type Name	Description
Duet 1	Adds close (separated by two to four degrees) 1-note harmony below the melody note.
Duet 2	Adds open (separated by more than 4 to 6 degrees) 1-note harmony below the melody note.
Country	Adds country style harmony.
Octave	Adds the note from the next lower octave.
5th	Adds the fifth degree note.
3-Way Open	Adds 2-note open harmony, for a total of three notes.
3-Way Close	Adds 2-note close harmony, for a total of three notes.
Strings	Adds harmony that is optimal for strings.
4-Way Open	Adds 3-note open harmony, for a total of four notes.
4-Way Close	Adds 3-note close harmony, for a total of four notes.
Block	Adds block chord notes.
Big Band	Adds big band style harmony.

7. Play chords and the melody on the keyboard.

Harmony will be added to your melody notes based on the chords you play.

Using Pads



You can assign various sampled sound or short phrases* to the Digital Keyboard's pads. You can sound what is assigned to pads individually, you can sound multiple pads at the same time. A collection of pad sounds is called a "bank".

* The MZ-X500 (only) also has built-in chord progressions that can be used as Auto Accompaniments.

Playing Back Short Phrases

You can assign short phrases to the Digital Keyboard's pads, which you can then play along with Auto Accompaniment. These phrases can be used to add accents to your performance or to Auto Accompaniment.

You can also automatically assign phrases that are appropriate for the currently selected tone (Upper 1) to pads with the touch of a button.

To select a short phrase with the PAD screen

- On the MENU screen, touch "PAD".
This displays the PAD screen.
- On the PAD screen, touch the bank name you want to select.
This displays the PAD BANK SELECT screen.
- On the PAD BANK SELECT screen, touch the "Phrase" category.

4. Touch the bank you want.

PAD BANK SELECT					
Phrase	Sampling	Chord	Multi	User	
				Name	
001				006	Accomp Set 1
Melody Set 1				007	Accomp Set 2
002				008	Accomp Set 3
Melody Set 2				009	Accomp Set 4
003				010	Accomp Set 5
Melody Set 3					
004					
Melody Set 4					
005					
Melody Set 5					
					1/10
					3 4 1 2

5. Tap a pad (23) to hear the phrase assigned to it.

NOTE

- Removing your finger from a pad causes the phrase to stop. For information about how to sustain a phrase when the pad is released, see "Configuring a Pad to Remain Depressed (Hold Function)" (page EN-35).

To assign phrases appropriate for the Upper 1 tone

- Press the 18 PHRASE button.
This assigns phrases to the pads that are appropriated for the current Upper 1 tone.
- Tap a pad (23) to hear the phrase assigned to it.

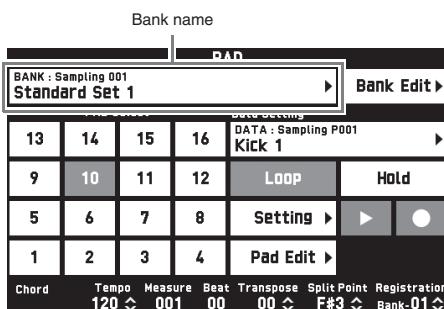
Sounding Sampled Sounds

Use the procedures in this section to assign sampled sounds to pads and to sound the samples. You can also automatically assign sampled sounds that are appropriate for the currently selected tone (Upper 1) to pads with the touch of a button.

To select a sampled sound with the PAD screen

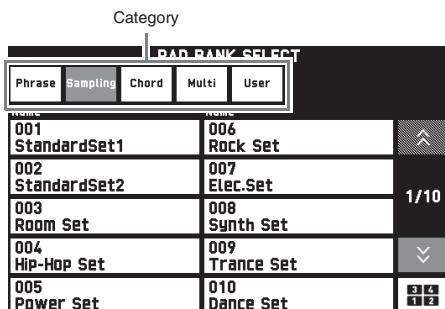
- On the MENU screen, touch "PAD".

This displays the PAD screen.



- On the PAD screen, touch the bank name you want to select.

This displays the PAD BANK SELECT screen.



- On the PAD BANK SELECT screen, touch the "Sampling" category.
- Touch the bank you want.
- Tap a pad (23) to hear the sample assigned to it.

NOTE

- Removing your finger from a pad that has a long sample causes the sound to stop. For information about how to sustain a sound when the pad is released, see "Configuring a Pad to Remain Depressed (Hold Function)" (page EN-35).

To assign sampled sounds appropriate for the Upper 1 tone

- Press the 19 SAMPLING button.

You can use the procedure below to assign sampled sounds that match the selected Upper 1 tone to pads automatically.

- Tap a pad (23) to hear the sound assigned to it.

NOTE

- Banks can also be switched using the 20 BANK ▲ and 21 BANK ▼ buttons (MZ-X300 only).

Specifying an Auto Accompaniment Chord Progression (Chord Play) (MZ-X500 only)

You can tap a pad while Auto Accompaniment play is in progress to play Auto Accompaniment in accordance with the chord progress assigned to the pad. You can also automatically assign chord progressions that are appropriate for the currently selected Auto Accompaniment to pads with the touch of a button.

To select a short phrase with the PAD screen

- On the PAD BANK SELECT screen, touch the "Chord" category.
- Touch the bank you want.
- While Auto Accompaniment is playing, tap a pad (23).

The chord progression assigned to the pad you tap is reflected in the Auto Accompaniment.

To assign chord progressions that match the selected Auto Accompaniment

- Press the **20 CHORD** button.

This assigns chord progressions that match the currently selected Auto Accompaniment to the pads.

- While Auto Accompaniment is playing, tap a pad (**23**).

The chord progression assigned to the pad you tap is reflected in the Auto Accompaniment.

NOTE

- An assigned chord progression can be a single chord or a full progression of multiple chords. For details, see the separate "Tutorial" manual.

Assigning Multiple Functions (MZ-X500 only)

You can use the procedures in this section to assign different types of data (sample, phrase, chord progression) to pads. The ability to use multiple functions simultaneously greatly expands the potential of performances using pads.

You can also automatically assign functions that are appropriate for the currently selected tone (Upper 1) and/or Auto Accompaniment to pads with the touch of a button.

To select a short phrase with the PAD screen

- On the PAD BANK SELECT screen, touch the "Multi" category.
- Touch the bank you want.
- Tap a pad (**23**).

An operation in accordance with the function assigned to the pad is performed.

To assign functions that match current settings

- Press the **21 MULTI** button.

This assigns functions that match current settings to pads.

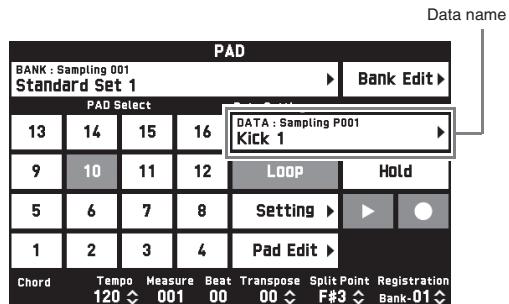
- Tapping a pad (**23**) performs the operation of the function assigned to it.

Changing the Function of a Specific Pad

Perform the procedure below change the function assigned to a pad.

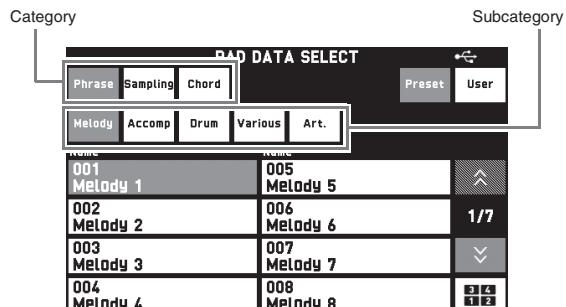
- On the PAD screen, touch the number of the pad whose function you want to change.
- Touch the data name.

This displays the PAD DATA SELECT screen.



- Touch a category in the top line of the PAD DATA SELECT screen, and then touch a subcategory in the second line.

This displays a list of pad data.



- Touch the data you want to use.

Changing Pad Settings

This section explains how to use the loop function and hold function. You can also change the settings of other functions. For details, see the separate “Tutorial” manual.

Repeating Pad Playback (Loop Function)

You can use the loop function to play back the same sample or phrase repeatedly.

1. On the PAD screen, touch the number of the pad whose setting you want to configure.
2. Touch “Loop” to turn it on.
3. Press and hold the pad whose setting you changed.

This will repeatedly play the sampled sound or phrase.

NOTE

- With the MZ-X500, you can also use the loop function for chord progressions.

Configuring a Pad to Remain Depressed (Hold Function)

With the Hold Function, you can ensure that a long sample or phrase is played back even if you release a pad after pressing it.

1. On the PAD screen, touch the number of the pad whose setting you want to configure.
2. Touch “Hold” to turn it on.
3. Tap the pad whose setting you changed.

This will cause the pad to behave as if you have kept it depressed.

NOTE

- While a pad for which “Hold” has been turned on is playing back, tapping the pad again will stop playback.
- With the MZ-X500, you can also use the hold function for chord progressions.

Saving a Bank

A bank whose pad functions have been changed can be saved as a user bank.

1. Touch “PAD BANK EDIT”.
This displays the PAD BANK EDIT screen.
2. On the PAD BANK EDIT screen, touch “Write”.
“Write”.
3. After inputting the bank name, touch “Enter”.
“Enter”.
4. Touch the destination user bank.
If a user bank already contains data, there will be an asterisk (*) next to the bank name.
5. Touch “Execute”.
If the selected bank does not have any data stored to it, the message “Sure?” will appear. If it does have data stored to it, the message “Replace?” will appear.
6. Touch “Yes”.
If the selected bank has data stored to it, existing data will be overwritten with the new data.

Stopping Playback of All Pads

You can use the operation below to stop pad playback when you have multiple pads with the Hold Function enabled playing back at the same time.

1. Press the **34 SYNCHRO STOP** button.
This stops all pads that are currently playing.

Synchronizing Pads with Accompaniment

Use the procedure below to synchronize Auto Accompaniment and pad playback start timing automatically. Phrase and/or sample playback is performed simultaneously with the start of Auto Accompaniment, which enables richer sound and more powerful impact that is not possible with normal Auto Accompaniment.

1. While holding down the **33 SYNCHRO START** button, tap the pad you want to synchronize with.

This will cause the pad and the **33 SYNCHRO START** button lamp to start to flash. (MZ-X500 only: Pad will flash.)

2. Starting Auto Accompaniment will also start playback of the synchronized pad at the same time.

NOTE

- Enable the pad's Hold Function if the pad has a long sample, phrase, or chord progression assigned to it.
- You can repeat step 1 as many times as required to synchronize with multiple pads, if you want.

Recording Data to a Pad

You can use the procedures in this section to record a sampled sound, phrase, or chord progression to each pad.

To record a sampled sound

1. On the PAD screen, select the pad to which you want to record the sampled sound.

2. Touch “●” (REC).

This displays the PAD RECORD SELECT screen.

3. Touch “Sampling”.

This displays the PAD RECORD WAIT screen.

4. On a device connected to the **LINE IN** or **MIC IN** terminal, play the sound you want to record.

This automatically starts recording.

- To stop recording, touch “■” (STOP).

5. Press the pad you specified in step 1.

This will playback the sample you recorded.

NOTE

- You can also record keyboard play, Auto Accompaniment, or MIDI recorder playback.
- Sampling stops automatically after the allowable sampling time elapses.

To record a phrase

1. On the PAD screen, select the pad to which you want to record the phrase.

2. Touch “●” (REC).

This displays the PAD RECORD SELECT screen.

3. On the PAD RECORD SELECT screen, touch “Phrase”.

This displays the PAD RECORD WAIT screen.

4. On the keyboard, play the phrase you want to record.

This automatically starts recording.

- To stop recording, touch “■” (STOP).

5. Press the pad you specified in step 1.

This starts playback of the phrase you selected.

To record a chord progression (MZ-X500 only)

- 1.** Select an Auto Accompaniment chord fingering mode.
 - For details, see “To select a chord fingering mode” (page EN-29).
- 2.** On the PAD screen, select the pad to which you want to record the chord progression.
- 3.** Touch “●” (REC).

This displays the PAD RECORD SELECT screen.
- 4.** On the PAD RECORD SELECT screen, touch “Chord”.

This displays the PAD RECORD WAIT screen.
- 5.** Play a chord with the Auto Accompaniment keyboard.

This will automatically record the chord progression.
For information about how to use the Auto Accompaniment keyboard, see “Playing an Auto Accompaniment” (page EN-27).

 - To stop recording, touch “■” (STOP).
- 6.** While the Auto Accompaniment is playing, press the pad that you selected in step 2 as the recording destination.

This will cause the recorded chord progression to be reflected in the accompaniment.

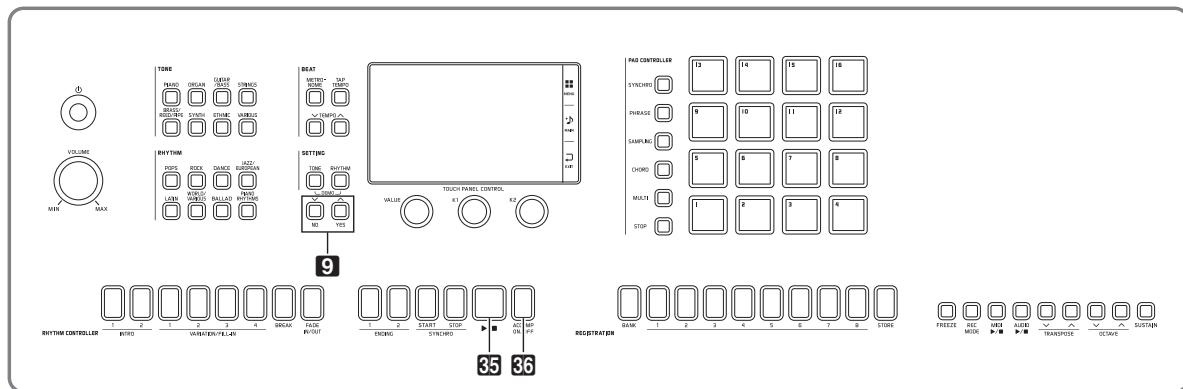
To save recording data

If you don't save recorded data, it will be deleted automatically the next you perform a record operation.

- 1.** While the data you want to save is recorded to a pad, touch “PAD EDIT” on the PAD screen.

This displays the PAD DATA EDIT screen.
- 2.** On the PAD DATA EDIT screen, touch “Write”.
- 3.** After inputting the data name, touch “Enter”.
- 4.** Touch the save destination user data and then touch “Execute”.
- 5.** Touch “Yes”.
 - To cancel the save operation, touch “No”.

Music Presets



Music Presets provide you with one-touch tone, rhythm, chord, and other settings that are optimized for specific musical genres and songs. In addition to built-in presets, you can create your own original Music Presets (user presets). For information about user presets, see the separate “Tutorial” manual.

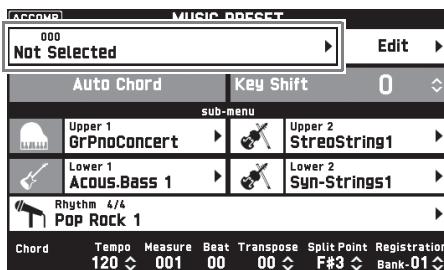
Recalling Preset Data

- On the MENU screen, touch “MUSIC PRESET”.

This displays the MUSIC PRESET screen and turns on Auto Chord.



- Touch the preset name.



- Touch the group that contains the preset you want to recall and then touch the preset name.

This configures the Digital Keyboard with the settings (tone, rhythm, etc.) of the selected preset.

- Press the 35 ▶/■ button to start Auto Accompaniment with the preset chord progression. Play the melody on the keyboard.

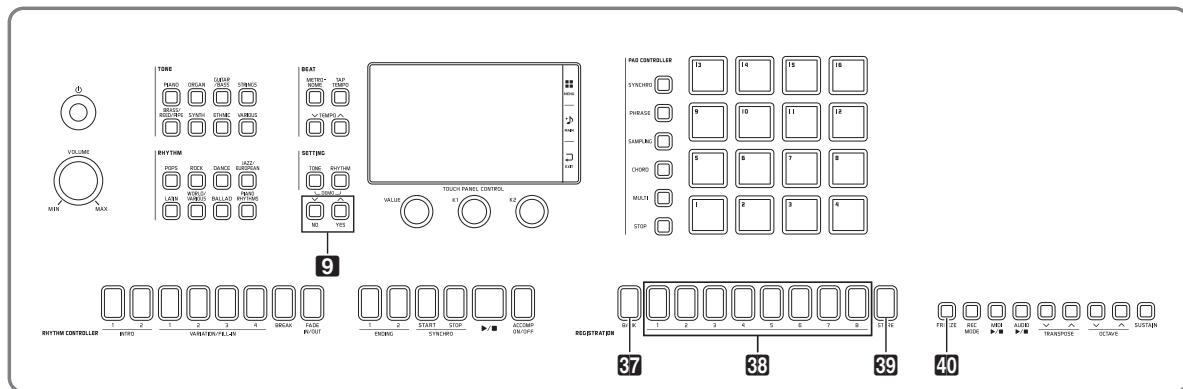
- The preset chord progression repeats until you stop it by pressing the 35 ▶/■ button again.
- Touching “Auto Chord” to turn it off turns off the preset chord progression, which enables play of the normal Auto Accompaniment pattern.
- To change the key of a preset chord progression, touch “Key Shift” and then use the 9 ▼/NO, ^/YES buttons to make the change.

NOTE

- To turn off Auto Chord, press the 36 ACCOMP ON/OFF button.
- For details about the settings for a recalled preset, see the separate Appendix.

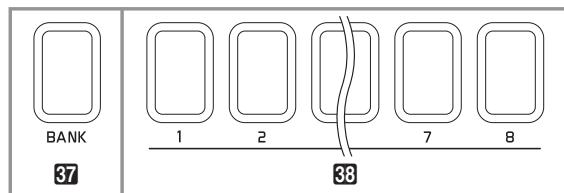
Registering Tone and Rhythm Setups

English



Registration memory lets you store Digital Keyboard setups (tone, rhythm, etc.) for instant recall whenever you need them. Registration memory simplifies performance of complex pieces that require successive tone and rhythm changes.

You can have up to 96 setups in Registration memory at one time. To select a setup, use the **37 BANK** button and **38 REGISTRATION** buttons 1 through 8.



	Area 1	Area 2	...	Area 7	Area 8
Bank 1	Setup 1-1	Setup 1-2	...	Setup 1-7	Setup 1-8
Bank 2	Setup 2-1	Setup 2-2	...	Setup 2-7	Setup 2-8
.
Bank 12	Setup 12-1	Setup 12-2	...	Setup 12-7	Setup 12-8

- Press the **37 BANK** button and then use the **9 ▼/NO, ▲/YES** buttons to change the bank number.
- Pressing a **38 REGISTRATION** button (1 through 8) selects the corresponding area in the currently selected bank.

NOTE

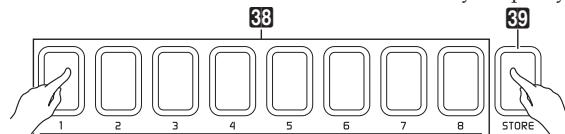
- Refer to the separate Appendix for details.

To save registration data

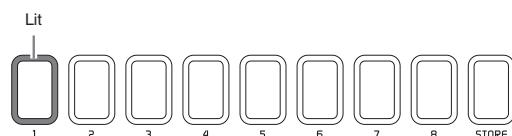
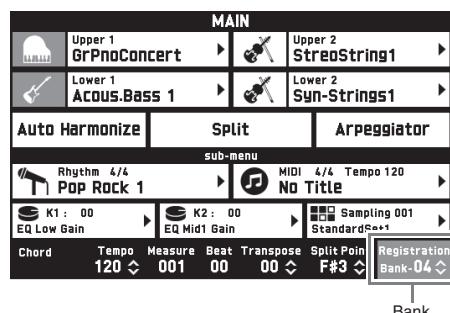
- Configure the Digital Keyboard with the tone, rhythm, and other settings you want to save.
- While holding down the **39 STORE** button, perform the operation below.

Use the **9 ▼/NO, ▲/YES** buttons to select the bank where you want to store the data, and then press a **38 REGISTRATION** button (1 through 8) to specify an area.

The data will be saved to the bank and area you specify.

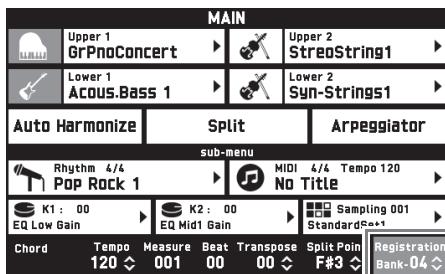


Example: Bank 4, Area 1



To recall a registration setup

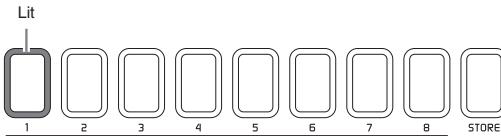
- Press the **37 BANK** button to select the bank that contains the setup you want to recall.
- The currently selected bank and area numbers are shown on the MAIN screen and button lamps.



- Press the button (**38 REGISTRATION 1 to 8**) of the area whose setup you want to recall.

This recalls the registration memory setup and automatically configures the Digital Keyboard settings accordingly.

Example: When recalling the registration data in Bank 4, Area 1



NOTE

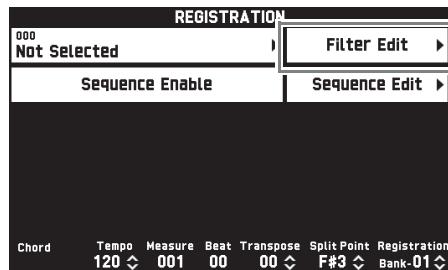
- You can also navigate between registration areas by pressing the pedal. For details, see the separate "Tutorial" manual.

Disabling Overwrite of Specific Settings (Freeze Function)

Recalling setup data registered to an area button normally causes the applicable Digital Keyboard settings to be overwritten by the recalled settings. With the Freeze Function, you can disable overwriting of specific setting items whenever setup data is recalled.

- On the menu screen, touch "REGISTRATION".

- On the REGISTRATION screen, touch "Filter Edit".



- Touch the items you want to remain unchanged (overwrite disabled) when you recall setup data.

An item that is "On" is overwrite disabled.

REGISTRATION FILTER			
Filter	Setting	Filter	Setting
Split Point	On	Controller	Off
Transpose	Off	Mixer	Off
Tone	Off	Pad	Off
Rhythm	Off		
Effect	Off		
System Setting	Off		

- Press the **40 FREEZE** button.

This causes the button's lamp to light.

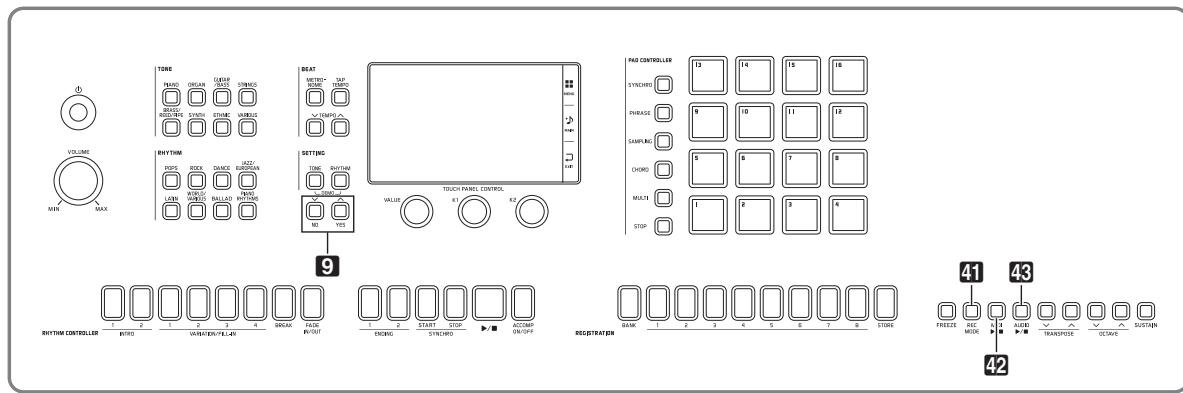


- Press an area button to recall the setup data registered to it.

While the **40 FREEZE** button lamp is lit, any item whose filter setting is "On" will not be overwritten when registered setup data is recalled.

Recording and Playback

English

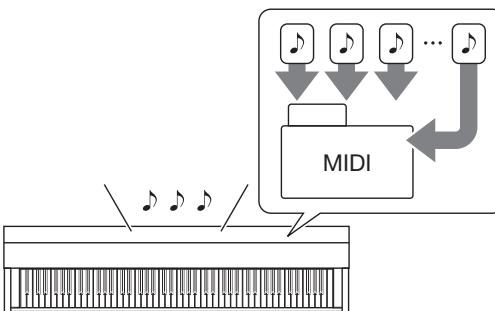
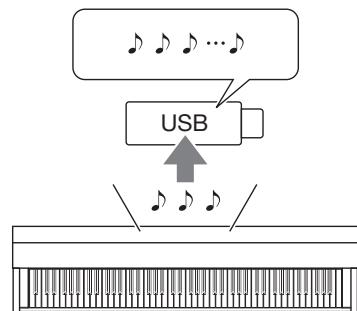


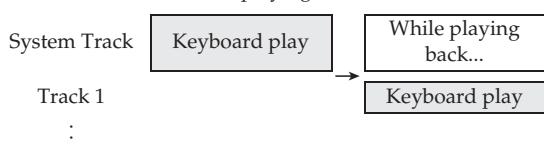
Your Digital Keyboard can record what you play on the keyboard and play it back when you want. The Digital Keyboard has two recording functions: a MIDI Recorder and an Audio Recorder. Select the function that suits the needs for the type of recording you want to make.

IMPORTANT!

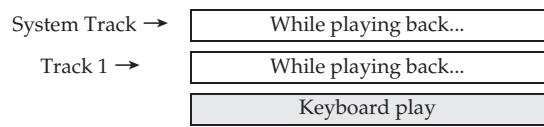
- CASIO COMPUTER CO., LTD. takes no responsibility for any damages, lost profits, or claims by third parties arising from the deletion of recorded data due to malfunction, repair, or for any other reason.

Recording Features

MIDI Recorder	Audio Recorder
<p>Keyboard performance information is recorded as MIDI data* to a system track or 16 tracks (storage areas for keyboard performance data) in Digital Keyboard memory.</p>  <ul style="list-style-type: none"> Keyboard performance information (keyboard keys press / release, touch pressure, etc.) is recorded as MIDI data. The size of MIDI data is much smaller when compared with audio data, making it easier to edit later on a computer, etc. Supported recording capacity: 100 songs approximately 50,000 notes per song (total of all tracks) 	<p>Keyboard performance information is recorded to a USB flash drive as audio data.</p>  <ul style="list-style-type: none"> Like a portable music player or tape recorder, notes are recorded as audio data. Audio data files are much larger compared to MIDI data files. The advantage of audio data files is that they can be easily played back on a computer, portable music player, etc. Supported recording capacity: Up to 100 files, each file up to a maximum length of 90 minutes

MIDI Recorder	Audio Recorder
<p>What you can do...</p> <p>Record to one track while playing back from the other track</p>  <pre> graph LR A[Keyboard play] --> B[While playing back...] B --> C[Keyboard play] C --- D[Track 1] C --- E[:""] </pre>	<p>What you can do...</p> <p>Record performance while playing back a song recorded with the MIDI Recorder</p>  <pre> graph LR A[MIDI Recorder song playback] + B[Keyboard play] --> C[Record] </pre> <p>Record input of an external device connected to the LINE IN or MIC IN terminal along with Digital Keyboard performance and playback</p> <p> NOTE</p> <ul style="list-style-type: none"> AUDIO IN terminal input is not recorded.

■ Playback Features

MIDI Recorder	Audio Recorder
<p>What you can do...</p> <p>Play on the keyboard along with playback of tracks</p>  <pre> graph LR A[System Track] --> B[While playing back...] B --> C[Track 1] C --> D[While playing back...] D --> E[Keyboard play] </pre>	<p>What you can do...</p> <p>You can play back audio data from a USB flash drive.</p> <ul style="list-style-type: none"> The Audio Recorder plays back the waveform of sound recorded as audio data.  <pre> graph LR A[Playback of a song on a USB flash drive] + B[Keyboard play] </pre>

* MIDI

MIDI is short for "Musical Instrument Digital Interface". It is a universal standard that makes it possible for musical instruments, computers, and other devices to exchange performance information (keyboard key press/release, touch pressure, etc.) regardless of manufacturer. Performance data in this case is called "MIDI data".

Recording to Digital Keyboard Memory (MIDI Recorder)

Perform the steps below to record your keyboard play to Digital Keyboard Memory.

- Configure the tone, rhythm, and other settings you want to use.
 - The settings you configure here will be included as part of the recorded MIDI data.
 - For details about the type of input that can be recorded, see the separate "Tutorial" manual.

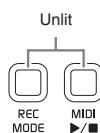
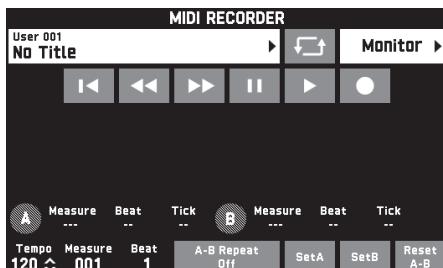
- On the MENU screen, touch "MIDI RECORDER".

- Touch "●".

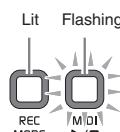
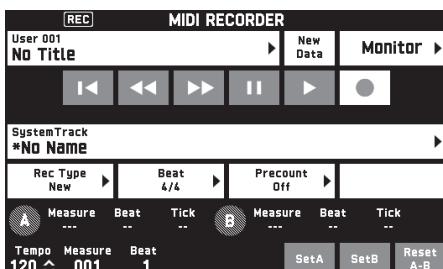
This turns on the recorder and enters record mode.

- Each touch of "●" cycles through modes as shown below.

Playback mode



Recording mode



- Touch "New Data".

This enables recording of new data to the system track.

- Play something on the keyboard.

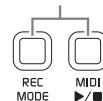
Recording starts as soon as you play something.

- You can also start recording by touching "▶".
- You also can configure the Digital Keyboard so Auto Accompaniment is included in the recorded data.
- The **42** MIDI ▶/■ button is lit while recording is in progress.

- After you finish recording, touch "■".

This causes the **41** REC MODE button and **42** MIDI ▶/■ button lamps to become unlit, and enters the playback mode.

Unit: Playback mode



NOTE

- You can also enter the recording mode by pressing the **41** REC MODE button and then touching "MIDI RECORDER". This method can be used to enter the recording mode only for making a new recording.
- Recording memory capacity is approximately 50,000 notes per song. When remaining capacity is 100 or fewer notes, the **42** MIDI ▶/■ button lamp will flash at high speed. Recording will stop automatically when the allowable limit is reached.
- Your Digital Keyboard has a variety of other recording and editing functions, such as track recording for individual Auto Accompaniment parts, punch-in recording for re-recording of a specific section of the an Auto Accompaniment. etc. For details, see the separate "Tutorial" manual.

IMPORTANT!

- The Digital Keyboard has memory for 100 songs.
- If power to the Digital Keyboard is cut off while recording is in progress, everything you recorded up to that point will be lost. Take care so power is not turned off accidentally during recording operations.

To delete recorded data

1. On the MENU screen, touch “MIDI RECORDER”.
2. Touch the data name.
3. Touch “User Data Edit”.
4. Touch “Delete”.
5. Touch the data you want to delete.
6. Touch “Execute”.
7. Touch “Yes”.

This deletes the MIDI data you selected.
 • To cancel the delete operation, touch “No”.

To play MIDI data

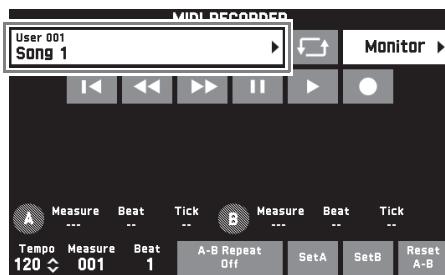
You can use the procedure below to perform auto play of MIDI data (MIDI recording data or SMF files) stored in Digital Keyboard memory or on a USB flash drive, and practice along on the keyboard.

- For information about loading a USB flash drive on the Digital Keyboard and importing MIDI data to Digital Keyboard memory, see “Loading Data from a USB Flash Drive to Digital Keyboard Memory” (page EN-64).

1. On the MENU screen, touch “MIDI RECORDER”.

This displays a MIDI RECORDER screen.

2. Touch the file name.



3. Touch the “User” tab to play back MIDI data stored in Digital Keyboard memory or the “Media” tab to play back from a USB flash drive.
4. Touch the MIDI data you want to play.

5. Touch “▶”.

This starts playback.

- You can also start playback by pressing the **42** MIDI ▶/■ button.
- The operations below are supported while MIDI data is playing back, during playback standby, or while playback is paused.

This icon:	Does this:
↻	Performs repeat play. Each touch of an icon cycles the setting in the following sequence: 1 song repeat → All song repeat → Off.
◀	Returns to the beginning of a song.
◀◀	Rewinds. A single touch rewinds one measure, holding down performs continuous rewind.
▶▶	Fast forwards. A single touch fast forwards one measure, holding down performs continuous fast forward.
⏸	Pauses or resumes the currently playing MIDI data. The icon flashes while playback is paused.
▶/■	Starts playback MIDI data or stops playback.
●	Toggles between the recording mode and playback mode.

6. To stop playback, touch “■”.

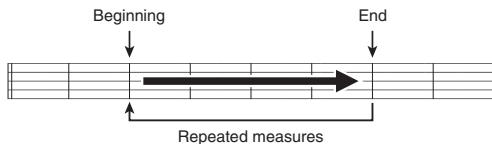
- You can also stop playback by pressing the **42** MIDI ▶/■ button.

To adjust the Balance between Playback and Keyboard Volume (MIDI Volume)

You can change the volume level of the MIDI data auto play only, without affecting the volume of the keyboard. For details, see "BALANCE Screen" under "Configuring Digital Keyboard Settings" (page EN-52).

To repeat playback of a specific section (Repeat)

You can configure the Digital Keyboard to repeat the section of a song you want to practice. You could, for example, specify repeat play from measure 5 to measure 8.



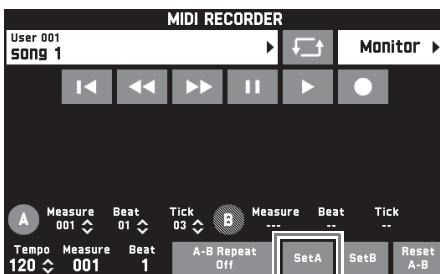
1. Touch "▶".

This starts auto play.

2. When play reaches the beginning of the section you want to repeat, touch "Set A".

This makes the measure where you touched "Set A" the "start measure".

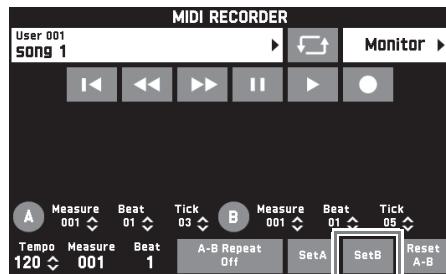
- You can also make fine adjustments to the start point. After touching "Measure", "Beat", or "Tick" for Point A, you can then use the 9 V/NO, ^/YES buttons to adjust.



3. When play reaches the end of the section you want to repeat, touch "Set B".

This makes the measure where you touched "Set B" the "end measure".

- You can also make fine adjustments to the end point. After touching "Measure", "Beat", or "Tick" for Point B, you can then use the 9 V/NO, ^/YES buttons to adjust.



4. Touch "A-B Repeat" to enable repeat playback.

This starts repeat playback of the specified section.

5. To disable repeat playback, touch "A-B Repeat" again, which will return to normal playback.

NOTE

- To clear the start measure and end measure settings, touch "Reset A-B".

Recording to a USB Flash Drive (Audio Recorder)

Anything played on the Digital Keyboard is recorded to the USB flash drive as audio data (WAV files*). If you play along on the Digital Keyboard as you playback data stored in Digital Keyboard memory, the memory playback and your keyboard play are both recorded to USB flash drive.

* Linear PCM, 16bit, 44.1 kHz, Stereo

- Each new recording of audio data to a USB flash drive is automatically assigned a new file name, so existing data is not overwritten.
- Never remove the USB flash drive while Audio Recorder recording or playback is in progress. Doing so can corrupt the data on the USB flash drive and damage the USB flash drive port.

To record keyboard play to a USB flash drive

PREPARATION

- Be sure to format the USB flash drive on the Digital Keyboard before using it. See "USB Flash Drive" on page EN-61 for more information.

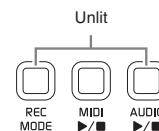
1. Insert the USB flash drive into the Digital Keyboard's USB flash drive port.
 - When you perform a USB flash drive operation or turn on the Digital Keyboard while a USB flash drive is plugged in, the Digital Keyboard initially needs to perform a "mounting" sequence to prepare for data exchange with the USB flash drive. Digital Keyboard operations may be momentarily disabled while a mounting sequence is being performed. While the mounting process is in progress, the message "Media Mounting" will be displayed on the display. It may take up to 10 or 20 seconds or even longer for a USB flash drive to be mounted. Do not attempt to perform any operation on the Digital Keyboard while a mounting sequence is in progress. A USB flash drive needs to be mounted each time it is connected to the Digital Keyboard.
2. On the MENU screen, touch "AUDIO RECORDER".

3. Touch "●".

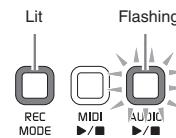
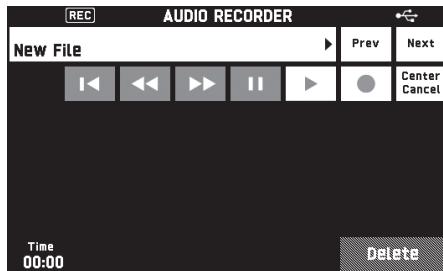
This turns on the recorder and enters recording mode.

- Each touch of "●" cycles through modes as shown below.

Playback mode



Recording mode



4. Start playing something on the keyboard.

This will cause recording to the USB flash drive to start.

- You can also start recording by touching "▶".
- The **43** AUDIO ▶/■ button is lit while recording is in progress.

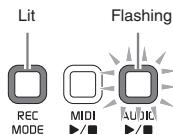
5. To stop recording, touch "■".

NOTE

- Do not remove the USB flash drive from the USB flash drive port while the **43** AUDIO ▶/■ button lamp is lit or flashing. Doing so will interrupt recording and may corrupt data.
- You can also enter the recording mode by pressing the **41** REC MODE button and then touching "AUDIO RECORDER".

To record keyboard play with playback from Digital Keyboard memory

1. On the MENU screen, touch “AUDIO RECORDER”.
2. Touch “●” to enter the recording mode.



3. Touch “▶”.
4. Press the **42** MIDI ▶/■ button.
 - This starts playback of the Digital Keyboard's memory contents. Play along on the keyboard.
5. To stop recording, touch “■”.

To play along with data recorded on a USB flash drive

1. On the MENU screen, touch “AUDIO RECORDER”.
 - The above step is not necessary if you are playing back recorded data immediately after recording it (while the AUDIO RECORDER screen is displayed).

2. Touch the file name.

This displays the audio file selection screen.



3. Touch the song you want to play.

4. Touch “▶”.

This starts playback of the selected song.

- You can also start playback by pressing the **43** AUDIO ▶/■ button.
- The **43** AUDIO ▶/■ button is flashing while playback is in progress.
- The operations below are supported while audio data is playing back, during playback standby, or while playback is paused.

Note that rewind (◀◀) and fast forward (▶▶) operations are supported only while audio data is playing back or while playback is paused.

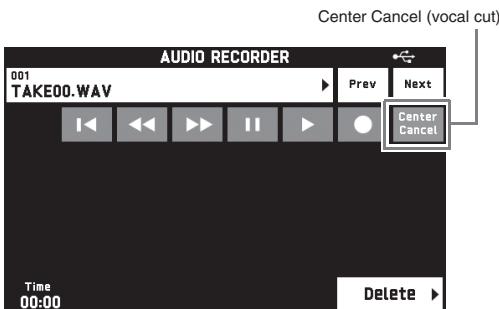
This icon:	Does this:
Prev	Plays the previous audio data.
Next	Plays the next audio data.
◀	Returns to the beginning of a song.
◀◀	Rewinds. A single touch rewinds one second, holding down performs continuous rewind.
▶▶	Fast forwards. A single touch fast forwards one second, holding down performs continuous fast forward.
■	Pauses or resumes the currently playing audio data. The icon flashes while playback is paused.
▶/■	Starts playback from the beginning of audio data or stops playback.
●	Toggles between the recording mode and playback mode.

5. To stop the song, touch “■”.

- You can also stop playback by pressing the **43** AUDIO ▶/■ button.

Center Cancel (Vocal Cut)

This effect lets you eliminate (delete or reduce the volume of) the vocal part of a song. Note that this function cancels the sound in the center position of the audio, which may (depending on how the original audio was mixed) end up canceling something else other than the vocal part. How the effect is applied depends on the audio being played back.



To delete an audio file from a USB flash drive

Files can be deleted one at time.

IMPORTANT!

- The procedure below deletes all of the data of the selected song. Note that the delete operation cannot be undone. Check to make sure you really do not need the data in Digital Keyboard memory before you perform the following steps.

1. On the MENU screen, touch “AUDIO RECORDER”.

2. Touch the file name.

3. Touch “Delete”.

4. Touch the data you want to delete.

5. Touch “Execute”.

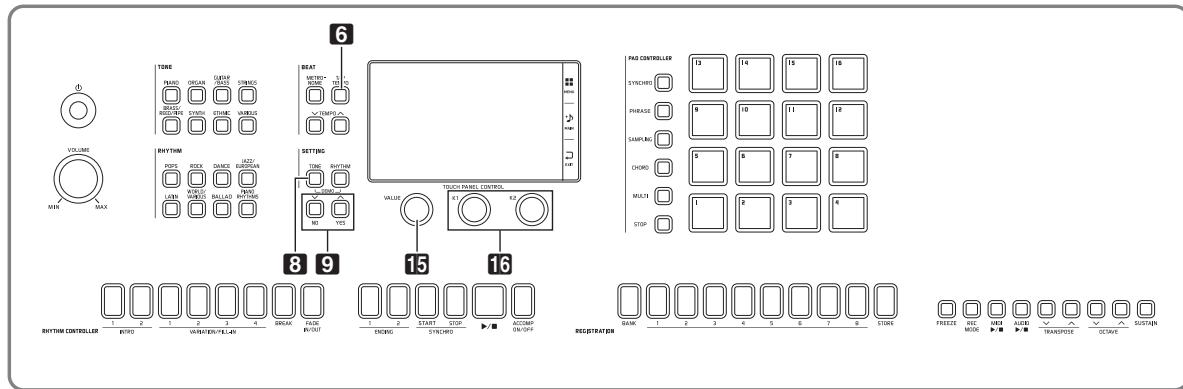
6. Touch “Yes”.

This deletes the audio data you selected.

- To cancel the delete operation, touch “No”.

Configuring Digital Keyboard Settings

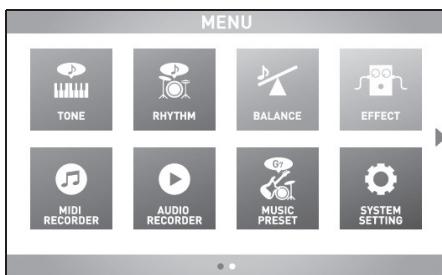
English



On the MENU screen, you can change the selected tone and rhythm, and also change the keyboard key and touch settings, pedal and MIDI settings, and more. This means you can tailor Digital Keyboard operation to suit your particular needs.

Configuring Digital Keyboard Settings

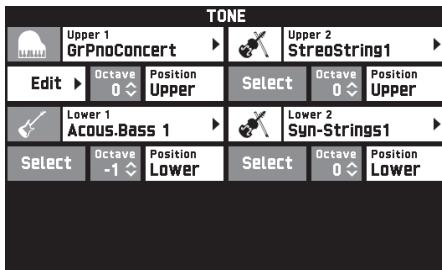
1. On the MENU screen, touch the menu for the settings you want to configure.



2. Touch the item whose setting you want to change.
3. Use the **15 VALUE** dial or the **9 ▼/NO, ▲/YES** buttons to change the setting.

■ TONE Screen

Use this screen to configure tone and other keyboard settings.



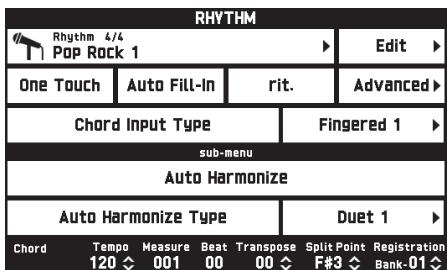
NOTE

- You can also display the TONE screen by pressing the **8** TONE button.

Item	Description	Setting
Upper 1, Upper 2, Lower 1, Lower 2	Turns each part on or off, and specifies its tone.	Off, On
Edit	Use these settings to edit tones.	See the separate "Tutorial" manual.
Select	Selects a part for tone editing.	See the separate "Tutorial" manual.
Octave	Change the range of each part in octave units.	-3 to 0 to 3
Position	Toggles a tone between Upper and Lower.	Upper, Lower
Feet (When a drawbar organ tone is selected)	Adjusts the harmonic overtone level of each tone footage (16' to 1').	0 to 8
Volume (When a Hex Layer Tone is selected)	Adjusts the volume of each layer.	0 to 127

■ RHYTHM Screen

Use this screen to configure Auto Accompaniment settings.



Item	Description	Setting
Rhythm	Sets the rhythm.	-
Edit	Use this item to create an original rhythm. See the separate "Tutorial" manual.	-
One Touch	One Touch preset. Touching overwrite tone information to match the rhythm.	-
Auto Fill-In	When enabled (turned on), a temporary fill-in pattern is played whenever you switch to another rhythm variation.	Off, On
rit	Ritardando. Touching this item while accompaniment is playing causes the Auto Accompaniment tempo to slow down gradually.	-
Advanced	Select to configure the settings below. Use the 9 V/NO, A/YES to change number settings.	
Fade In Measure	Specifies the number of measures from fade-in start to finish.	1 to 16
Fade In Value	Specifies the volume at the start of fade-in.	0 to 100
Fade Out Measure	Specifies the number of measures from fade-out start to finish.	1 to 16
Ritardando Measure	Specifies the number of ritardando measures.	1 to 16
Ritardando Reach Tempo	Starting from the ritardando start tempo, specifies how much the tempo drops within the number of measures specified by Ritardando Measure.	0 to 100
Tap Start	When "On", starts Auto Accompaniment when the 6 TAP TEMPO button is tapped.	Off, On
Chord Input Type	Specifies the Auto Accompaniment fingering mode. See page EN-29.	-
Auto Harmonize	See page EN-31.	Off, On
Auto Harmonize Type	Selects the Auto Harmonize type. See page EN-31.	-

■ BALANCE Screen

Use this screen to adjust volume settings for the keyboard, Auto Accompaniment, etc.

BALANCE			
Parameter	Setting	Parameter	Setting
Upper 1 Volume	127 ◇	Upper 2 Volume	127 ◇
Lower 1 Volume	127 ◇	Lower 2 Volume	127 ◇
Keyboard Volume	127 ◇	Accomp Volume	127 ◇
MIDI Volume	127 ◇	Metronome Volume	127 ◇
Audio Volume	127 ◇		
External In Volume	127 ◇		

Item	Description	Setting
Upper 1 Volume	See page EN-19.	0 to 127
Upper 2 Volume	See page EN-19.	0 to 127
Lower 1 Volume	See page EN-19.	0 to 127
Lower 2 Volume	See page EN-19.	0 to 127
Keyboard Volume	Adjusts the volume levels of all parts that are controlled by the keyboard.	0 to 127
Accomp Volume	Adjusts the volume level of the Auto Accompaniment without changing the keyboard tone volume level.	0 to 127
MIDI Volume	Adjusts the volume level of the MIDI data without changing the keyboard tone volume level.	0 to 127
Metronome Volume	See page EN-20.	0 to 127
Audio Volume	Adjusts the volume level of audio data stored on a USB flash drive.	0 to 127
External In Volume	Adjusts the volume of the sound input from the LINE IN and MIC IN terminals.	0 to 127

■ EFFECT Screen

Use this screen to apply variety of acoustic effects to notes.

Your Digital Keyboard has three types of effects, each of which includes the effects described below.

A) Digital Signal Processor (DSP)

A collection of versatile Normal DSP effects help to enhance the sound of tones. For example, distortion can be applied to an electric guitar sound to make it sound more powerful. There are 20 different Normal DSP types, and the most appropriate one for the selected tone is applied automatically.

B) System Effects (SYSTEM)

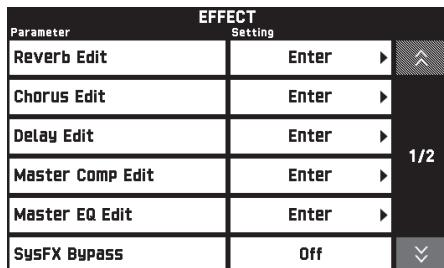
These effects are shared by all Digital Keyboard parts. The depth of an effect can be adjusted by specifying the send level from the part to each system effect.

- Chorus: Combines multiple layers of the same note to create a sound with more depth.
- Delay: Delays the input signal and feeds it back to create a repeating effect and give notes more breadth.
- Reverb: Adds reverberation to make it sound like you are playing in a room or in a hall.

C) Master Effects (MASTER)

These effects are applied to the Digital Keyboard master output signal.

- Equalizer (Master Equalizer (EQ)): Adjusts the master frequency characteristics. The Master Equalizer can be used to adjust the frequency and gain of four frequency bands: low, mid1, mid2, and high.
- Compressor (Master Compressor): Compresses the instrument master output signal. This effect can be used to suppress level dispersion and limit the level of the input signal so it does not exceed the setting value.



Item	Description	Setting
Reverb Edit		See the separate "Tutorial" manual.
Chorus Edit		See the separate "Tutorial" manual.
Delay Edit		See the separate "Tutorial" manual.
Master Comp Edit		
Threshold	Adjusts the threshold (where application of an effect starts) level. Set a lower value for a compressor effect, and a higher value for a limiter effect.	0 to 127
Ratio	Adjusts the compression ratio. Set a lower value to for a compressor effect, and the maximum value to for a limiter effect.	0 to 127
Level	Adjusts the output level.	0 to 127
Attack	Adjusts the time until the compression effect starts. A smaller value causes prompt compressor operation, which suppresses the attack of the input signal. A larger values delays compressor operation, which causes the attack of the input signal to be output as-is.	0 to 127
Release	Adjusts the release time. Adjusts the time until the compression effect is released.	0 to 127
Position	Selects the connection position with the compressor EQ.	PreEQ, PostEQ

Item	Description	Setting
Master EQ Edit	See page EN-60.	
SysFX Bypass	Temporarily disables (bypasses) system effects.	Off, On
MasFX Bypass	Temporarily disables (bypasses) master effects.	Off, On
DSP1 Select	Selects the DSP Line 1 algorithm.	See the separate "Tutorial" manual.
DSP1 Bypass	Temporarily disables (bypasses) DSP1 effects.	Off, On
DSP2 Select	Selects the DSP Line 2 algorithm.	See the separate "Tutorial" manual.
DSP2 Bypass	Temporarily disables (bypasses) DSP2 effects.	Off, On

■ MIDI RECORDER Screen

Use this screen to record a performance to Digital Keyboard memory and to play back recordings. For more information, see "Recording to Digital Keyboard Memory (MIDI Recorder)" (page EN-43).

■ AUDIO RECORDER Screen

Use this screen to record a performance on a commercially available USB flash drive, and to play back recorded audio data on the Digital Keyboard. For more information, see "Recording to a USB Flash Drive (Audio Recorder)" (page EN-46).

■ MUSIC PRESET Screen

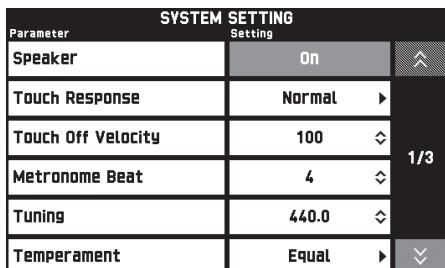
Music presets provide you with one-touch tone, rhythm, chord, and other settings that are optimized for specific musical genres and songs. In addition to built-in presets, you can create your own original music presets (user presets). For more information, see "Music Presets" (page EN-38).

■ PAD screen

Use this screen to assign, record, configure settings, and perform other operations for phrases and samples to be used by pads. For details, see "Using Pads" (page EN-32).

■ SYSTEM SETTING Screen

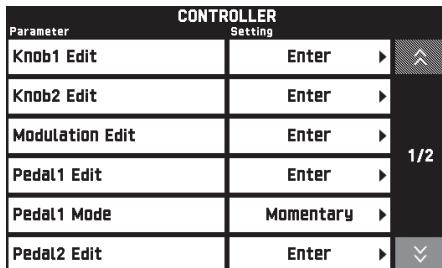
Use this screen to configure global Digital Keyboard settings.



Item	Description	Setting
Speaker	Specifies whether sound should be output from the Digital Keyboard speakers (On) or muted (Off).	Off, On
Touch Response	Adjusts keyboard touch.	Off: Disabled Light: Strong sound even with light pressure Normal: Normal key touch Heavy: Normal sound even with strong pressure
Touch Off Velocity	Specifies the velocity value when the Touch Response setting is Off.	0 to 127
Metronome Beat	Specifies the number of metronome beats per measure.	0 to 9
Tuning	Raises or lowers the overall pitch of the Digital Keyboard from the standard pitch of A4 = 440 Hz in 0.1Hz units.	415.5Hz to 440.0Hz to 465.9Hz
Temperament	Changes the temperament of the keyboard and Auto Accompaniment from the standard equal temperament to another tuning more suitable for playing classics, Arabian music, etc.	Equal, Pure Major, Pure Minor, Pythagorean, Kirnberger 3, Werckmeister, Mean-Tone, Rast, Bayati, Hijaz, Saba, Dashti, Chahargah, Segah, Gurjari Todi, Chandrakauns, Charukeshi
Temperament Base Note	Pressing a keyboard key makes the pressed key the root of the temperament.	C to B (12 types)
Acmp Temperament	Turn this setting off to play Auto Accompaniment using standard equal temperament, regardless of the current scale setting selected with the Temperament Base Note parameter above.	Off, On
Brightness	Use this item to adjust display brightness.	1 to 13
Auto Resume	When "On" is selected for this setting, the Digital Keyboard will remember its settings whenever it is turned off, and restore them when it is turned on again. When "Off" is selected, settings are reset to their initial defaults whenever the Digital Keyboard is turned on.	Off, On
Auto Power Off	Specifies if Auto Power Off (page EN-8) is enabled (On) or disabled (Off).	Off, On
Factory Reset	Use this screen to return the Digital Keyboard's stored data and settings to their initial factory defaults.	-
Advanced	Select to configure more advanced system settings. See the separate "Tutorial" manual.	
Information	Shows the version of the firmware installed on the Digital Keyboard. Also use this item when updating the Digital Keyboard firmware.	-

■ CONTROLLER Screen

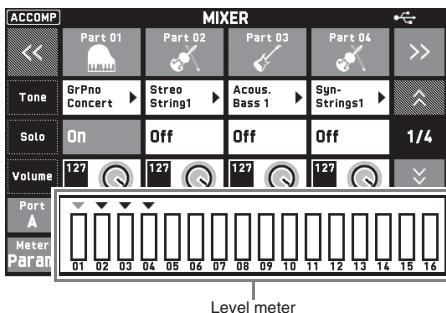
Use this to configure pedal and pitch bend wheel settings.



Item	Description	Setting
Knob1-2 Edit	This is a group editable parameters for 16 knobs (K1, K2).	
Target	Selects the parameters to be controlled by a controller. For example, the "CC67:Soft" setting specifies a soft pedal effect. • Two targets can be specified for a single controller.	See the separate "Tutorial" manual.
Min Value	Controller minimum output value setting.	0 to 127
Max Value	Controller maximum output value setting.	0 to 127
Upper1 Enable	Turning on this setting applies output MIDI messages to the Upper1 tone.	Off, On
Upper2 Enable	Turning on this setting applies output MIDI messages to the Upper2 tone.	Off, On
Lower1 Enable	Turning on this setting applies output MIDI messages to the Lower1 tone.	Off, On
Lower2 Enable	Turning on this setting applies output MIDI messages to the Lower2 tone.	Off, On
Auto Resolution (Knobs 1, 2 only)	Turning on this setting causes the amount of change applied when a knob is rotated to be in accordance with the "Target", "Min Value", and "Max Value" settings. When this setting is off, each click of a knob changes the applicable setting by one.	Off, On
Modulation Edit	This is a group of 48 MODULATION wheel editable parameters. Details of the editable parameters are the same as "Knob1 Edit", above.	
Pedal 1-2 Edit	Group of editable parameters for pedals connected to the PEDAL1, PEDAL2 terminals. Details of the editable parameters are the same as "Knob1 Edit", above.	
Pedal 2 Type	Specifies whether the pedal connected to the PEDAL2 jack is to be used as a foot switch or an expression pedal. Do not change this setting while the pedal is depressed.	Foot Switch, Exp. Pedal
Pedal 1 Mode Pedal 2 Mode	Selects the operation performed when the pedal is pressed. Momentary: On while the pedal is depressed, off while the pedal is released. Toggle: On after the pedal is pressed and remains on even if the pedal is released. Off: When the pedal is pressed again.	Momentary, Toggle
Bend Range	Specifies (in semitone units) how much the pitch of the keyboard performance parts (Port A parts 1 through 5) changes when the pitch bend wheel is rotated all the way upwards or downwards.	00 to 24

MIXER Screen

This screen mixer lets you adjust the source tone, volume level, and other setting items of the Digital Keyboard sound source parts (Parts 01 through 16), while viewing the balance between the parts on the display. For details, see "Using the Sliders" (page EN-24).



Level meter

Item	Meaning	Setting
Part	A part that is turned on is sounded. Turn off parts you do not want to sound.	Off, On
Tone	Changes the tone.	1100 (MZ-X500), 900 (MZ-X300)
Solo	Turn on to sound the applicable part only.	Off, On
Volume	Adjusts the volume. The volume level of each part is shown by an on-screen level meter.	0 to 127
Pan	Specifies the stereo pan position of the sound output by the Digital Keyboard. 0 indicates the center, while a smaller values shifts to the left and a larger value shifts to the right.	-64 to 0 to +63
Coarse Tune	Specifies, in semitone steps, the pitch of the notes of each part.	-24 to 0 to +24
Fine Tune	Specifies, in cent steps, the pitch of the notes of each part.	-99 to 0 to +99
Bend Range	Adjusts, in semitone steps, the bend range of each part.	0 to 24
Reverb Send	Specifies how much reverb is applied to each part. No reverb is applied at all when this setting is 0, while maximum reverb is applied when it is 127.	0 to 127
Chorus Send	Specifies how much chorus is applied to each part. No chorus is applied at all when this setting is 0, while maximum chorus is applied when it is 127.	0 to 127
Delay Send	Specifies how much delay is applied to each part. No delay is applied at all when this setting is 0, while maximum delay is applied when it is 127.	0 to 127
Line Select	Specifies which DSP is applied to the selected part.	Off, DSP1, DSP2
Port	Specifies the port. For information about MIDI channels assigned to each port, see "Part and MIDI Channel Assignments and Diagram" in the separate "Tutorial" manual.	Port A, Port B, Port C
Level/Param switch	Toggles the level meter display between volume levels and parameter settings.	Param, Level
Level meter	Shows the volume level or setting of each part.	-

NOTE

- Besides part 01 through 16, the MIXER screen can be used to change External (external parts) and Mix (all parts) settings. Note, however, that External and Mix can be used to change only the parameters below.
External: Volume, Reverb Send, Chorus Send, Delay Send, Line Select
Mix: Volume
- When "Solo" is turned on, pressing a keyboard key sounds that part only. All other types of performance operations (layer, split, Auto Accompaniment, etc.) are disabled.

■ MIDI Screen

Use this screen to configure MIDI settings.

For information about MIDI channels assigned to each port, see the separate “Tutorial” manual.

MIDI	
Parameter	Setting
Keyboard Channel	01 ▾
Accomp Out	Off
Chord Judge	Off
Local Control	On
MIDI Out/Thru	Out ►
MIDI In Port	C ►

Item	Description	Setting
Keyboard Channel	Selects the channel for sending keyboard play MIDI data to an external device (keyboard channel).	01 to 16
Accomp Out	Turn on this setting to send MIDI data corresponding to Auto Accompaniment to an external device.	Off, On
Chord Judge	Turning on this setting enables Auto Accompaniment chord input in accordance with the keyboard key press information input in the MIDI channel (any one of ports A, B, or C) specified by the Keyboard Channel from MIDI IN. Just as when chords are input on the keyboard, the chord input keyboard range is for Auto Accompaniment chord input.	Off, On
Local Control	Selecting “Off” for Local Control cuts off the Digital Keyboard’s sound source, so no sound is produced by the Digital Keyboard when keys are pressed.	Off, On
MIDI Out/Thru	Specifies either Out or Thru as the MIDI OUT terminal function.	Out, Thru
MIDI In Port	Select the port to be used for input from the MIDI In.	A, B, C

■ MEDIA Screen

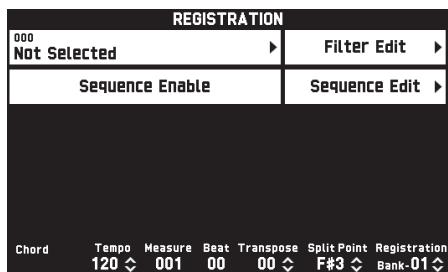
Use this screen to save data to a USB flash drive inserted in the Digital Keyboard and to import data from a USB flash drive to Digital Keyboard memory. For more information, see “USB Flash Drive” (page EN-61).

■ ARPEGGIATOR Screen

Screen for configuring arpeggiator settings. For details, see “Sounding Arpeggio Phrases Automatically (Arpeggiator)” (page EN-21).

■ REGISTRATION Screen

You can specify which current settings should be left unchanged when parameter settings are recalled using the registration function.

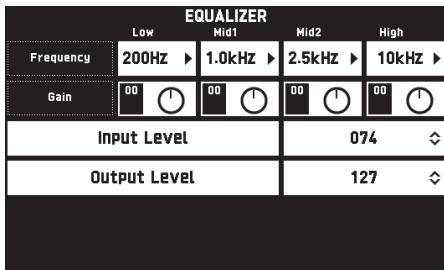


Item	Description	Setting
Registration Area	Selects a registration area.	
Filter Edit	Touching this button displays the REGISTRATION FILTER screen. Use the screen to enable or disable overwriting of each setting item.	See page EN-40.
Sequence Enable	Enables/disables registration sequence.	Off, On
Sequence Data No.	Shows the data number of the currently selected sequence data.	
Position	Shows what sequential number the current sequence is.	
Bank	Shows the bank number of the currently selected sequence data.	
Reset Position	Moves the sequence position to "Top".	
Position Synchro	On: Automatically shows previous and following sequences in accordance with the current position. Off: Shows a fixed range of sequences, regardless of the current position.	Off, On
Sequence End Type	Specifies the operation to be performed when the sequence "End" is reached. No: No operation. Repeat: Returns to item number 1, without changing the sequence number. Next Seq Data: Advances to the next sequence data. Sequence Data X: Goes to the Xth sequence data.	
Sequence Edit	Touching this button displays the REGISTRATION SEQUENCE EDIT screen. Use this screen to specify the sequence data number to be edited.	See the separate "Tutorial" manual.

- For details about setting items saved by registration, refer to the separate "Tutorial" manual.

■ EQUALIZER Screen

Adjusts the frequency characteristics of all tones.



Item	Description	Setting
Low Frequency	Selects the low-range cutoff frequency.	50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800 (Hz)
Low Gain	Adjusts the low-range gain.	-12 to 0 to +12
Mid1 Frequency	Selects the low mid-range frequency.	100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1.0k, 1.3k, 1.6k, 2.0k, 2.5k, 3.2k, 4.0k, 5.0k, 6.3k, 8.0k (Hz)
Mid1 Gain	Adjusts the low mid-range gain.	-12 to 0 to +12
Mid2 Frequency	Selects the middle high-range frequency.	100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1.0k, 1.3k, 1.6k, 2.0k, 2.5k, 3.2k, 4.0k, 5.0k, 6.3k, 8.0k (Hz)
Mid2 Gain	Adjusts the middle high-range gain.	-12 to 0 to +12
High Frequency	Selects the high-range cutoff frequency.	2.0k, 2.5k, 3.2k, 4.0k, 5.0k, 6.0k, 8.0k, 10k, 13k, 16k (Hz)
High Gain	Adjusts the high-range gain.	-12 to 0 to +12
Input Level	Adjusts the input level.	0 to 127
Output Level	Adjusts the output level.	0 to 127

USB Flash Drive

Your Digital Keyboard supports the following USB flash drive operations.

- USB flash drive formatting
- Data storage to a USB flash drive
 - Song data recorded with the Digital Keyboard's MIDI recorder is stored on a USB flash drive as-is or stored as a MIDI file (SMF format 0).
 - Standard audio data from a computer (WAV files) can also be stored on a USB flash drive and played back on the Digital Keyboard.
 - Digital Keyboard play can be recorded directly to a USB flash drive.
For details, see "Recording to a USB Flash Drive (Audio Recorder)" (page EN-46).
 - Storage of edited Auto Accompaniment data on a USB flash drive
- USB flash drive data loading to Digital Keyboard memory
 - MIDI files and CASIO format files stored on a USB flash drive can be loaded into the Digital Keyboard memory (page EN-44).
- Delete data from a USB flash drive
- Easy play back of song data from a USB flash drive

■ Types of Data

Data Type	Description (File Name Extension)	Supported Operations	
		Save to USB Flash Drive	Load from USB Flash Drive
User rhythms* See the separate "Tutorial" manual.	Auto Accompaniment data edited with this Digital Keyboard (AC7)	<input type="radio"/>	<input type="radio"/>
User Tones See the separate "Tutorial" manual.	The tone data below edited with this Digital Keyboard. Melody tones 1. Normal tone (ZTN) 2. Versatile tones (ZVT) 3. Piano tones (ZPF) Hex layer tones (MZ-X500 only) (ZLT) Drum sound data (ZDR) Drawbar organ tones (ZDO)	<input type="radio"/>	<input type="radio"/>
User MIDI data (pages EN-44, EN-41)	One of the following two types of music data 1. Standard MIDI files (MID) SMF Format 0 or Format 1 2. MIDI data recorded on this Digital Keyboard (ZMF)	<input type="radio"/>	<input type="radio"/>

Data Type	Description (File Name Extension)	Supported Operations	
		Save to USB Flash Drive	Load from USB Flash Drive
User Music Presets (page EN-38)	Music Preset data edited on this Digital Keyboard (ZMP)	<input type="radio"/>	<input type="radio"/>
Registration (page EN-39)	Tone and rhythm setup settings (ZRM)	<input type="radio"/>	<input type="radio"/>
Pad bank	Pad bank information (ZPB)	<input type="radio"/>	<input type="radio"/>
Sampling	Sampled data and user wave tones (ZWT)	<input type="radio"/>	<input type="radio"/>
Phrase data	Phrase data (ZPH)	<input type="radio"/>	<input type="radio"/>
Chord sequence data	Chord sequence data (ZCD)	<input type="radio"/>	<input type="radio"/>
Arpeggios	Arpeggio data (ZAR)	<input type="radio"/>	<input type="radio"/>
All tones	All user tone data (ZTA)	<input type="radio"/>	<input type="radio"/>
All Auto Accompaniments	All user Auto Accompaniment data (ZAA)	<input type="radio"/>	<input type="radio"/>
All registrations	All registration data (ZRA)	<input type="radio"/>	<input type="radio"/>

* Your Digital Keyboard also supports import of rhythm data created on another device. Supported file name extensions are: ac7, z00, and ckf.

USB Flash Drive and USB Flash Drive Port Handling Precautions

IMPORTANT!

- Be sure to observe the precautions provided in the documentation that comes with the USB flash drive.
- Avoid using a USB flash drive under the following conditions. Such conditions can corrupt data stored on the USB flash drive.
 - Areas subjected to high temperature, high humidity, or corrosive gas
 - Areas subjected to strong electrostatic charge and digital noise
- Never remove the USB flash drive while data is being written to or loaded from it. Doing so can corrupt the data on the USB flash drive and damage the USB flash drive port.
- Never insert anything besides a USB flash drive into the USB flash drive port. Doing so creates the risk of malfunction.
- A USB flash drive can become warm after very long use. This is normal and does not indicate malfunction.
- Static electricity conducted to the USB flash drive port from your hand or from a USB flash drive can cause malfunction of the Digital Keyboard. If this happens, turn the Digital Keyboard off and then back on again.

Copyrights

You are allowed to use recordings for your own personal use. Any reproduction of an audio or music format file, without the permission of its copyright holder, is strictly prohibited under copyright laws and international treaties. Also, making such files available on the Internet or distributing them to third parties, regardless of whether such activities are conducted with or without compensation, is strictly prohibited under copyright laws and international treaties. CASIO COMPUTER CO., LTD. shall not be held in any way liable for any use of this Digital Keyboard that is illegal under copyright laws.

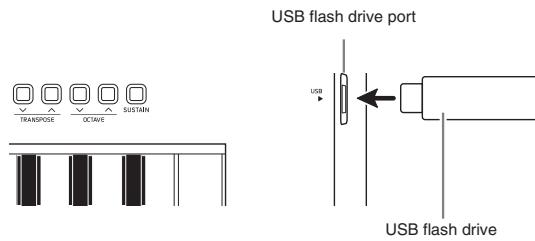
Connecting a USB Flash Drive to and Detaching It from the Digital Keyboard

IMPORTANT!

- Never plug any other device besides a USB flash drive into the USB flash drive port.
- When you perform a USB flash drive operation or turn on the Digital Keyboard while a USB flash drive is plugged in, the Digital Keyboard initially needs to perform a “mounting” sequence to prepare for data exchange with the USB flash drive. Digital Keyboard operations may be momentarily disabled while a mounting sequence is being performed. While the mounting process is in progress, the message “Media Mounting” will be displayed. It may take up to 10 or 20 seconds or even longer for a USB flash drive to be mounted. Do not attempt to perform any operation on the Digital Keyboard while a mounting sequence is in progress. A USB flash drive needs to be mounted each time it is connected to the Digital Keyboard.

■ To insert a USB flash drive

1. As shown in the illustration below, insert the USB flash drive into the Digital Keyboard's USB flash drive port.
 - Carefully push the USB flash drive in as far as it will go. Do not use undue force when inserting the USB flash drive.



■ To remove a USB flash drive

1. Check to confirm that there is no data exchange operation being performed, and then pull the USB flash drive straight out.

Formatting a USB Flash Drive

IMPORTANT!

- Be sure to format a USB flash drive on the Digital Keyboard before using it for the first time.
- Before formatting a USB flash drive, make sure it does not have any valuable data stored on it.
- The format operation performed by this Digital Keyboard is a “quick format”. If you want to completely delete all of the data in USB flash drive, format it on your computer or some other device.

Supported USB Flash Drives

This Digital Keyboard supports USB flash drives formatted to FAT32. If your USB flash drive is formatted to a different file system, use the Windows format function to reformat it to FAT32. Do not use quick format.

1. Insert the USB flash drive to be formatted into the Digital Keyboard's USB flash drive port.
 2. On the MENU screen, touch “MEDIA”.
 3. Touch “FORMAT”.
- This displays a confirmation message (“Sure?”).
4. Touch “Yes”.
 - The message “Please Wait” remains on the display while the operation is being performed. Do not perform any operation while this message is on the display. “Complete” appears on the display after formatting is complete.
 - To cancel the format operation, touch “No”.

Saving Standard Song Data to a USB Flash Drive

Even when the file format is WAV (general audio data) or SMF (standard MIDI file), the procedure below can be used to save data to USB flash drive and play it back on the Digital Keyboard.

1. Connect the USB flash drive to your computer.
2. Move the song data file you want to play back to the MUSICDAT folder on the USB flash drive.
 - For information about playback see “To play along with data recorded on a USB flash drive” (page EN-47).

Saving Digital Keyboard Data to a USB Flash Drive

Digital Keyboard memory data (MIDI recorder songs) can be saved to a USB flash drive.

- MIDI Recorder songs can be converted to standard MIDI (SMF) files and stored on the USB flash drive.
- During recording of an Audio Recorder song, the data is stored directly to the USB flash drive, so the operation below is not required.

1. Insert the USB flash drive into the Digital Keyboard's USB flash drive port.
2. On the MENU screen, touch “MEDIA”.
3. Touch “Save”.
4. Touch the data type you want to save.
5. Touch the data you want to save.
6. Rename the file as required.
7. After renaming the file, touch “Enter”.

This displays a confirmation message (“Sure?”). If there already a file with the same name on the USB flash drive, a confirmation message (“Replace?”) will appear asking if you want to overwrite it with the new data.

8. Touch “Yes”.
 - The message “Please Wait” remains on the display while the operation is being performed. Do not perform any operation while this message is on the display. “Complete” appears on the display after data save is complete.
 - To cancel the save operation, touch “No”.

Loading Data from a USB Flash Drive to Digital Keyboard Memory

You can use the procedure below to load data from a USB flash drive into Digital Keyboard memory.

IMPORTANT!

- Place the data (file) you want to load into the MUSICDAT folder on the USB flash drive.
- 1.** Insert the USB flash drive into the Digital Keyboard's USB flash drive port.
 - 2.** On the MENU screen, touch "MEDIA".
 - 3.** Touch "Load".
 - 4.** Touch the data type of the data you want to import.
 - 5.** On the "USB" list, touch the data you want to import.
 - 6.** On the "User Area" list, touch the import destination you want.
 - If you are importing MIDI data, you will not be able to specify an import destination.
 - 7.** Touch "Execute".

This displays an import confirmation message ("Sure?"). If there is already data in the import destination in Digital Keyboard memory, a message ("Replace?") will appear asking if you want to replace it with the new data.
 - 8.** Touch "Yes".
 - The message "Please Wait" remains on the display while the operation is being performed. Do not perform any operation while this message is on the display. "Complete" appears on the display after data import is complete.
 - To cancel the import operation, touch "No".

Deleting Data from a USB Flash Drive

Use the following procedure to delete USB flash drive data (files).

- 1.** Insert the USB flash drive into the Digital Keyboard's USB flash drive port.
- 2.** On the MENU screen, touch "MEDIA".
- 3.** Touch "Delete".
- 4.** Touch the data type of the data you want to delete.
- 5.** Touch the data you want to delete.
- 6.** Touch "Execute".

This displays a delete confirmation message ("Sure?").
- 7.** Touch "Yes".
 - The message "Please Wait" remains on the display while the operation is being performed. Do not perform any operation while this message is on the display. "Complete" appears on the display after data delete is complete.
 - To cancel the delete operation, touch "No".

Connecting to a Computer

English

You can connect the Digital Keyboard to a computer and exchange MIDI data between them. You can send play data from the Digital Keyboard to commercially available music software running on your computer, or you can send MIDI data from your computer to the Digital Keyboard for playback.

Minimum Computer System Requirements

The following shows the minimum computer system requirements for sending and receiving MIDI data. Check to make sure that your computer complies with these requirements before connecting the Digital Keyboard to it.

● Operating System

Windows Vista® *1

Windows® 7 *2

Windows® 8 *3

Windows® 8.1 *4

Windows® 10 *5

Mac OS® X (10.7, 10.8, 10.9, 10.10)

*1: Windows Vista (32-bit)

*2: Windows 7 (32-bit, 64-bit)

*3: Windows 8 (32-bit, 64-bit)

*4: Windows 8.1 (32-bit, 64-bit)

*5: Windows 10 (32-bit, 64-bit)

● USB port

IMPORTANT!

- Never connect to a computer that does not conform to the above requirements. Doing so can cause problems with your computer.

NOTE

- For the latest news about supported operating systems, visit the website at the URL below.

<http://world.casio.com/>

To connect the Digital Keyboard to your computer

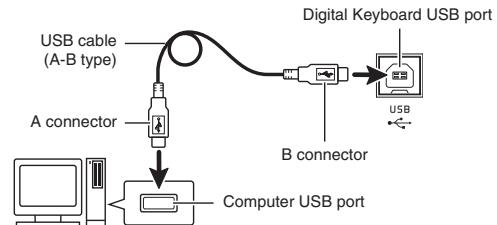
IMPORTANT!

- Make sure you follow the steps of the procedure below exactly. Connecting incorrectly can make data send and receive impossible.

- Turn off the Digital Keyboard and then start up your computer.

- Do not start up the music software on your computer yet!

- After starting up your computer, use a commercially available USB cable to connect it to the Digital Keyboard.



- Turn on the Digital Keyboard.

- If this is the first time you are connecting the Digital Keyboard to your computer, the driver software required to send and receive data will be installed on your computer automatically.

- Start up commercially available music software on your computer.

- Configure the music software settings to select "CASIO USB-MIDI" as the MIDI device.

- For information about how to select the MIDI device, see the user documentation that comes with the music software you are using.

IMPORTANT!

- Be sure to turn on the Digital Keyboard first before starting up your computer's music software.

 **NOTE**

- Once you are able to connect successfully, there is no problem with leaving the USB cable connected when you turn off your computer and/or Digital Keyboard.
- This Digital Keyboard conforms to General MIDI Level 1 (GM).
- For detailed specifications and connections that apply to MIDI data send and receive by this Digital Keyboard, see the latest support information provided by the website at the following URL.
<http://world.casio.com/>

Using MIDI

What is MIDI?

The letters MIDI stand for Musical Instrument Digital Interface, which is the name of a worldwide standard for digital signals and connectors that makes it possible to exchange musical data between musical instruments and computers (machines) produced by different manufacturers.

For details about the MIDI specifications of this Digital Keyboard, see the "MIDI Implementation" document at the website located at the URL below.

<http://world.casio.com/>

 **NOTE**

- You can alter the Digital Keyboard's MIDI setup by changing the MIDI data send channel or other settings. For details, see "MIDI Screen" (page EN-58).
- Use a separately available or commercially available MIDI cable to connect the MIDI terminals of your Digital Keyboard and another electronic musical instrument for exchange of MIDI data.
- MIDI terminals are disabled while the Digital Keyboard is connected to a computer via the USB port.



Reference

Error Messages

One of the error messages below appears on the display when a problem occurs.

- To clear an error message and return to the normal display, touch **14 EXIT** on the display.

Display Message	Cause	Action
No Media	<ol style="list-style-type: none"> The USB flash drive is not connected to the Digital Keyboard's USB flash drive port. The USB flash drive was removed while some operation was in progress. The USB flash drive is write-protected. The USB flash drive has anti-virus software. 	<ol style="list-style-type: none"> Correctly plug the USB flash drive into the USB flash drive port. Do not remove the USB flash drive while any operation is in progress. Unprotect the USB flash drive. Use a USB flash drive that does not have anti-virus software.
No File	There is no loadable file or no playable file in the "MUSICDAT" folder.	Move the file you want to load or play into the appropriate location (pages EN-63, EN-64) in the "MUSICDAT" folder.
No Data	You are attempting to save user data (user preset, user rhythm, MIDI data, etc.) when there is no data to save.	Select a user data item for which there is data to save.
Read Only	A read-only file with the same name you are trying to use is already stored on USB flash drive.	<ul style="list-style-type: none"> Change the name and then save the new data. Remove the read-only attribute from the existing USB flash drive file and overwrite it with the new data. Use a different USB flash drive.
Media Full	There is not enough space available on the USB flash drive.	Delete some of the files on the USB flash drive to make room for new data (page EN-64) or use a different USB flash drive.
Too Many Files	<ol style="list-style-type: none"> There are too many files on the USB flash drive. There is a file named TAKE99.WAV in the "MUSICDAT" folder. 	<ol style="list-style-type: none"> Delete some of the files on the USB flash drive to make room for new data. Delete the WAV file in the "MUSICDAT" folder.
Not SMF01	You are attempting to play back SMF Format 2 song data.	This Digital Keyboard supports playback of SMF Format 0 or Format 1 only.
Size Over	<ol style="list-style-type: none"> The MIDI recording data on the USB flash drive cannot be played because it is too big. The SMF file on the USB flash drive cannot be played because it is too big. The data you are trying to import cannot be imported because it is too big. 	<ol style="list-style-type: none"> The Digital Keyboard supports playback of MIDI recording data up to approximately 700KB. The Digital Keyboard supports playback of SMF files up to 320 KB. The Digital Keyboard supports import of data (per item) up to the maximum sizes shown below. User Rhythms: Approximately 64 KB User Presets: Approximately 6 KB
Wrong Data	<ol style="list-style-type: none"> The USB flash drive data is corrupted. USB flash drive contains data that is not supported by this Digital Keyboard. 	—
Memory Full	<ol style="list-style-type: none"> There is not enough Digital Keyboard memory available to convert a MIDI recorder song to SMF data and store it on the USB flash drive. There is not enough memory remaining for pattern sequencer operation. Remaining memory became too low during music preset editing. 	<ol style="list-style-type: none"> Reduce the size of the song data. Example: Delete any tracks that are not required. The maximum allowable size of data that can be written by the pattern sequencer (per user rhythm) is approximately 64 KB. The Digital Keyboard supports input of approximately 1,000 chords.
Format Error	<ol style="list-style-type: none"> The USB flash drive format is not compatible with this Digital Keyboard. The USB flash drive is corrupted. 	<ol style="list-style-type: none"> Format the USB flash drive on the Digital Keyboard. Use a different USB flash drive.
Media Error	The USB flash drive is corrupted.	Use a different USB flash drive.

Display Message	Cause	Action
Measure Limit	Attempting to input MIDI recording data or music preset that has more than 999 measures.	The Digital Keyboard supports input of up to 999 measures.
Data Full	Attempting to store data that exceeds the maximum allowable number of data items.	Delete unneeded data.

Troubleshooting

Problem	Cause	Action	See Page
No sound is produced when I press a keyboard key.	1. The VOLUME controller is set to "MIN". 2. Headphones or an adaptor plug is plugged into one of the PHONES jack. 3. Upper 1 icon is off. 4. The "Speaker" SYSTEM SETTING is off.	1. Rotate the VOLUME controller more towards "MAX". 2. Disconnect whatever is connected to the PHONES jack. 3. Touch the Upper 1 icon to turn it on. 4. Turn on the "Speaker" SYSTEM SETTING.	☞ EN-7 ☞ EN-9 ☞ EN-17 ☞ EN-55
The pitch of the Digital Keyboard is off.	1. Digital Keyboard tuning is incorrect. 2. The Digital Keyboard's key setting is something other than "440.0 Hz". 3. A non-standard temperament setting is being used. 4. Octave shift is enabled.	1. Adjust Digital Keyboard tuning, or turn the Digital Keyboard off and then back on again. 2. Change the key setting to "440.0 Hz", or turn Digital Keyboard power off and then back on again. 3. Change the temperament setting to "Equal", which is the standard modern tuning. 4. Change the octave shift setting to 0.	☞ EN-25 ☞ EN-55 ☞ EN-55 ☞ EN-50
Tones and/or effects sound strange. Turning power off and then back on again does not eliminate the problem. <i>Example: Note intensity does not change even though I alter key pressure.</i>	The "Auto Resume" feature is turned on.	Turn off "Auto Resume". Next, turn power off and then back on again.	☞ EN-55
I cannot transfer data after connecting the Digital Keyboard to a computer.	—	1. Check to make sure that the USB cable is connected to the Digital Keyboard and computer, and that the correct device is selected with your computer's music software. 2. Turn off the Digital Keyboard and then exit the music software on your computer. Next, turn the Digital Keyboard back on and then restart the music software on your computer.	☞ EN-65
I cannot record chord accompaniment data on my computer.	"Accomp Out" is turned off.	Turn on "Accomp Out".	☞ EN-58
I cannot store data to a USB flash drive or load data from a USB flash drive.	—	See "Error Messages".	☞ EN-67

Problem	Cause	Action	See Page
Playback stops part way through while transferring song data from my computer.	Digital noise from the USB cable or power cord caused data communication between your computer and Digital Keyboard to be interrupted.	Stop song playback, disconnect the USB cable from the Digital Keyboard, and then reconnect it. Next, try playing back the song again. If this does not solve the problem, quit the MIDI software you are using, disconnect the USB cable from the Digital Keyboard, and then reconnect it. Next, restart the MIDI software and then try playing back the song again.	EN-65
A tone's quality and volume sounds slightly different depending where it is played on the keyboard.	This is an unavoidable result of the digital sampling process,* and does not indicate malfunction. * Multiple digital samples are taken for the low range, middle range, and high range of the original musical instrument. Because of this, there may be a very slight difference in tonal quality and volume between sample ranges.		
When I press a button, the note that is sounding cuts out momentarily or there is a slight change in how effects are applied.	Performing a button operation while playing with the Auto Accompaniment, recorder, or other functions can cause such phenomena when the Digital Keyboard switches internal tone effects. It does not indicate malfunction.		
Even though I play on different ranges of the keyboard, the notes do not change octaves.	The ranges of certain tones are limited, which means that octaves change normally up to a certain low note or high note. With such a tone, the notes of the lowest octave will be repeated to the left of the lowest possible note, and the highest octave will be repeated to the right of the highest possible note. This is due to limitations in the range of the original musical instrument for each tone, and does not indicate malfunction of the Digital Keyboard.		

Product Specifications

Model	MZ-X500 MZ-X300
Keyboard	<p>61 standard-size keys</p> <ul style="list-style-type: none"> • Layer, Split • Transpose: 2 octaves (-12 to 0 to +12) • Octave shift: 6 octaves (-3 to 0 to +3) • Key off velocity
Sound Source	<ul style="list-style-type: none"> • Number of Tones: 1100 (MZ-X500), 900 (MZ-X300) • Melody Tones: 795 • Drawbar Organ Tones: 75 • Drum Sounds: 30 • Hex Layer Tones (MZ-X500 only) (Including Bass Synth tones.): 200 • Maximum polyphony: 128 notes • Touch Response (3 sensitivity levels, Off) • Tuning: 415.5 Hz to 440.0 Hz to 465.9 Hz (0.1 Hz units) • Temperament: Equal temperaments plus 16 other types
Display	5.3-inch touch panel (5.0-inch 528 × 320-dot TFT color LCD)
Effects	Reverb, Chorus, Delay, DSP, 4-band equalizer Editable
Auto Accompaniment	Number of Auto Accompaniments: 330 (MZ-X500), 280 (MZ-X300)
Music Preset	Data items: 305 preset, 100 user
Demo Song	6
Pads	<ul style="list-style-type: none"> • Number of pads: 16 (MZ-X500), 4 (MZ-X300) • Touch Response (MZ-X500 only), Samples, Phrases, Chord Sequences (MZ-X500 only)
MIDI Recorder	<ul style="list-style-type: none"> • Functions: Real-time recording, playback • Number of Song: 100 • Number of Tracks: 17 • Capacity: Up to approximately 50,000 notes per song • Recorded Data Protection: Built-in flash memory • MIDI Recorder Volume Level: Adjustable
Audio Recorder	<ul style="list-style-type: none"> • Real-time recording and playback to USB flash drive* <ul style="list-style-type: none"> * Linear PCM, 16bit, 44.1 kHz, stereo .WAV format • Songs: 100 files • Approximately 90 minutes maximum recording per file. • Audio Recorder Volume Level: Adjustable
Registration	96 (4 setups × 24 banks)
Metronome	<ul style="list-style-type: none"> • Beats: 0 to 9 • Tempo Range: 20 to 255 • Metronome Volume Level: Adjustable
Pedals	Damper, Soft, Sostenuto, Expression
Other Functions	<ul style="list-style-type: none"> • Modulation wheel • Arpeggiator • Control knobs • Balance adjustment • Setting backup
MIDI	16-channel multi-timbre receive
Pitch Bend Wheel	Pitch Bend Range: 00 to 24 semitones
USB Flash Drive	<ul style="list-style-type: none"> • Capacity: 32GB or less recommended • SMF direct playback, data storage, data loading, USB flash drive format, audio data playback and storage

Inputs/Outputs	<ul style="list-style-type: none"> PHONES jack: Stereo standard jack × 1 PEDAL1 jack: Standard jack × 1 PEDAL2, EXPRESSION jack: Standard jack × 1 Power: 24V DC MIDI OUT/THRU, IN terminals LINE IN R, L/MONO jacks: Standard jacks × 2 Input impedance: 9.0KΩ Input voltage: 200mV LINE OUT R, L/MONO jacks: Standard jacks × 2 Output impedance: 2.3KΩ Output voltage: 1.8V (RMS) MAX Audio In: Stereo mini jack Input impedance: 9.0KΩ Input voltage: 200mV USB port: Type B USB flash drive port: Type A Microphone input terminal: Standard jack (Connect a dynamic microphone.) Input impedance: 3.0KΩ Input sensitivity: 10mV
Speakers	ø 12cm × 2 + ø 5cm × 2 (Output 20W + 20W)
Power Requirements	AC Adaptor: AD-E24250LW <ul style="list-style-type: none"> Auto Power Off: Approximately 4 hours after last operation. Auto Power Off can be disabled.
Power Consumption	24V ≈ 20W
Dimensions	95.0 (W) × 40.0 (D) × 15.1 (H) cm (37 7/16 × 15 3/4 × 5 15/16 inch)
Weight	approximately 7.6kg (16.8 lbs)

- Specifications and designs are subject to change without notice.

Operating Precautions

Be sure to read and observe the following operating precautions.

- With a model that has a recording function or other data storage function, be sure to back up any data you want to maintain to another medium before submitting this product for servicing or repair. Stored data may be accessed or even deleted as part of servicing or repair procedures.

■ Location

Avoid the following locations for this product.

- Areas exposed to direct sunlight and high humidity
- Areas subjected to temperature extremes
- Near a radio, TV, video deck, or tuner
- The above devices will not cause malfunction of the product, but the product can cause interference in the audio or video of a nearby device.

■ User Maintenance

- Never use benzine, alcohol, thinner, or other chemical agents to clean the product.
- To clean the product or its keyboard, wipe with a soft cloth moistened in a weak solution of water and a mild neutral detergent. Wring all excess moisture from the cloth before wiping.

■ Included and Optional Accessories

Use only accessories that are specified for use with this product. Use of unauthorized accessories creates the risk of fire, electric shock, and personal injury.

■ Weld Lines

Lines may be visible on the exterior of the product. These are "weld lines" that result from the plastic molding process. They are not cracks or scratches.

■ Musical Instrument Etiquette

Always be aware of others around you whenever using this product. Be especially careful when playing late at night to keep the volume at levels that do not disturb others. Other steps you can take when playing late at night are closing windows and using headphones.

- Any reproduction of the contents of this manual, either in part or its entirety, is prohibited. Except for your own, personal use, any other use of the contents of this manual without the consent of CASIO is prohibited under copyright laws.
- IN NO EVENT SHALL CASIO BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION, LOSS OF INFORMATION) ARISING OUT OF THE USE OF OR INABILITY TO USE THIS MANUAL OR PRODUCT, EVEN IF CASIO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
- The contents of this manual are subject to change without notice.

■ AC Adaptor Handling Precautions

- Use a power outlet that is easily accessible so you can unplug the AC adaptor when a malfunction occurs or whenever else you need to do so.
- The AC adaptor is intended for indoor use only. Do not use it where it might be exposed to splashing or moisture. Do not place any container, such as a flower vase, that contains liquid on the AC adaptor.
- Store the AC adaptor in a dry place.
- Use the AC adaptor in an open, well-ventilated area.
- Never cover the AC adaptor with newspaper, a table cloth, a curtain, or any other similar item.
- Unplug the AC adaptor from the power outlet if you do not plan to use the Digital Keyboard for a long time.
- Never try to repair the AC adaptor or modify it in any way.
- AC adaptor operating environment
Temperature: 0 to 40°C
Humidity: 10% to 90% RH

Output polarity: 

AC Adaptor Handling Precautions

Model: AD-E24250LW

1. Read these instructions.
2. Keep these instructions on hand.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this product near water.
6. Clean only with a dry cloth.
7. Do not install near radiators, heat registers, stoves, or any other source of heat (including amplifiers).
8. Use only attachments and accessories specified by the manufacturer.
9. Refer all servicing to qualified service personnel. Servicing is required after any of the following occurs: when the product is damaged, when the power supply cord or plug is damaged, when liquid is spilled into the product, when a foreign object falls into the product, when the product is exposed to rain or moisture, when the product does not operate normally, when the product is dropped.
10. Do not allow the product to be exposed to dripping or splashing liquid. Do not place any object containing liquid on the product.
11. Do not allow the electrical load output to exceed the label rating.
12. Make sure the surrounding area is dry before plugging into a power source.
13. Make sure the product is oriented correctly.
14. Unplug the product during lightning storms or when you do not plan to use it for a long time.
15. Do not allow product ventilation openings to become blocked. Install the product in accordance with the manufacturer's instructions.
16. Take care the power cord is located where it will not be stepped upon or bent severely, particularly in locations close to plugs and convenience receptacles, and in locations where it exits from the product.
17. The AC adaptor should be plugged into a power outlet as close to the product as possible to allow immediate disconnection of the plug in case of emergency.

The symbol below is an alert indicating un-insulated hazardous voltage inside the product's enclosure, which may be sufficient to constitute the risk of electric shock to users.



The symbol below is an alert indicating the presence of important operating and maintenance (servicing) instructions in the documentation that accompanies the product.



STLport

Copyright 1994 Hewlett-Packard Company

Copyright 1996,97 Silicon Graphics Computer Systems, Inc.

Copyright 1997 Moscow Center for SPARC Technology.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Hewlett-Packard Company makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Silicon Graphics makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Moscow Center for SPARC Technology makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Information/Información

Fingering Guide/Guía de digitación

Fingered 1, Fingered 2 Chords/Acordeos Fingered 1, Fingered 2

C			C6 *1 *3	
Cm			Cm6 *2 *3	
Cdim			Cadd9	
Caug *3			Cmadd9	
C 5			C69 *3	
Csus4 *3			Cm69 *3	
Csus2 *3			C7 (b9)	
C7			C7 (9)	
Cm7 *3			C7 (#9)	
CM7			C7 (#11)	
CmM7			C7 (b13)	
Cdim7 *3			C7 (13)	
CdimM7			Cm7 (9)	
C7 5 *3			Cm7 (11) *3	
Cm7 5 *3			CM7 (9)	
CM7 5			CmM7 (9)	
Caug7			C5 (Root and 5th only) *4 (La raíz y la 5ta. solamente) *4	
CaugM7			C8 (Root only, or root plus octave) *4 (La raíz solamente o la raíz más la octava) *4	
C7sus4				

*1 With Fingered 2, interpreted as Am7.

*2 With Fingered 2, interpreted as Am7**5**.

*3 Inverted form not supported in some cases.

*4 Full Range Chord not supported.

*1 Con Fingered 2, se interpreta como Am7.

*2 Con Fingered 2, se interpreta como Am7**5**.

*3 En algunos casos no se puede usar de forma invertida.

*4 No es compatible con Full Range Chord.

Fingered 3, Full Range Chords/ Acordes Fingered 3, Full Range

In addition to the chords that can be fingered with Fingered 1 and Fingered 2, the following chords also are recognized.

Además de los acordes que se pueden digitar con Fingered 1 y Fingered 2, también se pueden reconocer los siguientes acordes.

$\frac{C\#}{C}$	$\cdot \frac{D}{C}$	$\cdot \frac{F}{C}$	$\cdot \frac{F\#}{C}$	$\cdot \frac{G}{C}$	$\cdot \frac{A^b}{C}$	$\cdot \frac{A}{C}$	$\cdot \frac{B^b}{C}$	$\cdot \frac{C\#m}{C}$	$\cdot \frac{Dm}{C}$	$\cdot \frac{Fm}{C}$
$\frac{F\#m}{C}$	$\cdot \frac{Gm}{C}$	$\cdot \frac{A^bm}{C}$	$\cdot \frac{Am}{C}$	$\cdot \frac{B^bm}{C}$	$\cdot \frac{Bm}{C}$	$\cdot \frac{C\#dim}{C}$	$\cdot \frac{Ddim}{C}$			
$\frac{Fdim}{C}$	$\cdot \frac{F\#dim}{C}$	$\cdot \frac{Gdim}{C}$	$\cdot \frac{A^bdim}{C}$	$\cdot \frac{Adim}{C}$	$\cdot \frac{Bdim}{C}$	$\cdot \frac{A^b7}{C}$	$\cdot \frac{F7}{C}$			
$\frac{Fm7}{C}$	$\cdot \frac{FM7}{C}$	$\cdot \frac{A^bM7}{C}$	$\cdot \frac{F\#m7^{b5}}{C}$	$\cdot \frac{Gm7}{C}$	$\cdot \frac{A^badd9}{C}$					

NOTE

- With Fingered 3, the lowest note fingered is interpreted as the base note. Inverted forms are not supported.
- With Full Range Chord, when the lowest fingered is a certain distance from the neighboring note, the chord is interpreted as a fraction chord.
- Unlike Fingered 1, 2, and 3, Full Range Chord requires pressing of at least three keys to form a chord.

NOTA

- Con Fingered 3, la nota más baja digitada se interpreta como nota base. No se pueden usar formas invertidas.
- Con Full Range Chord, cuando la nota digitada más baja se encuentre a cierta distancia de la nota adyacente, el acorde se interpreta como un acorde bitonal.
- A diferencia de Fingered 1, 2, y 3, Full Range Chord requiere la pulsación de tres teclas como mínimo para formar un acorde.

Chord Example List/Lista de ejemplos de acordes

Root Chord Type	C	C#/D ^b	D	(D [#])/E ^b	E	F	F#/(G ^b)	G	(G [#])/A ^b	A	(A [#])/B ^b	B
M												
m												
dim												
aug												
i5												
sus4												
sus2												
7												
m7												
M7												
mm7												
dim7												
dimM7												
7 ⁱ⁵												
M7 ⁱ⁵												
aug7												
augM7												
7sus4												

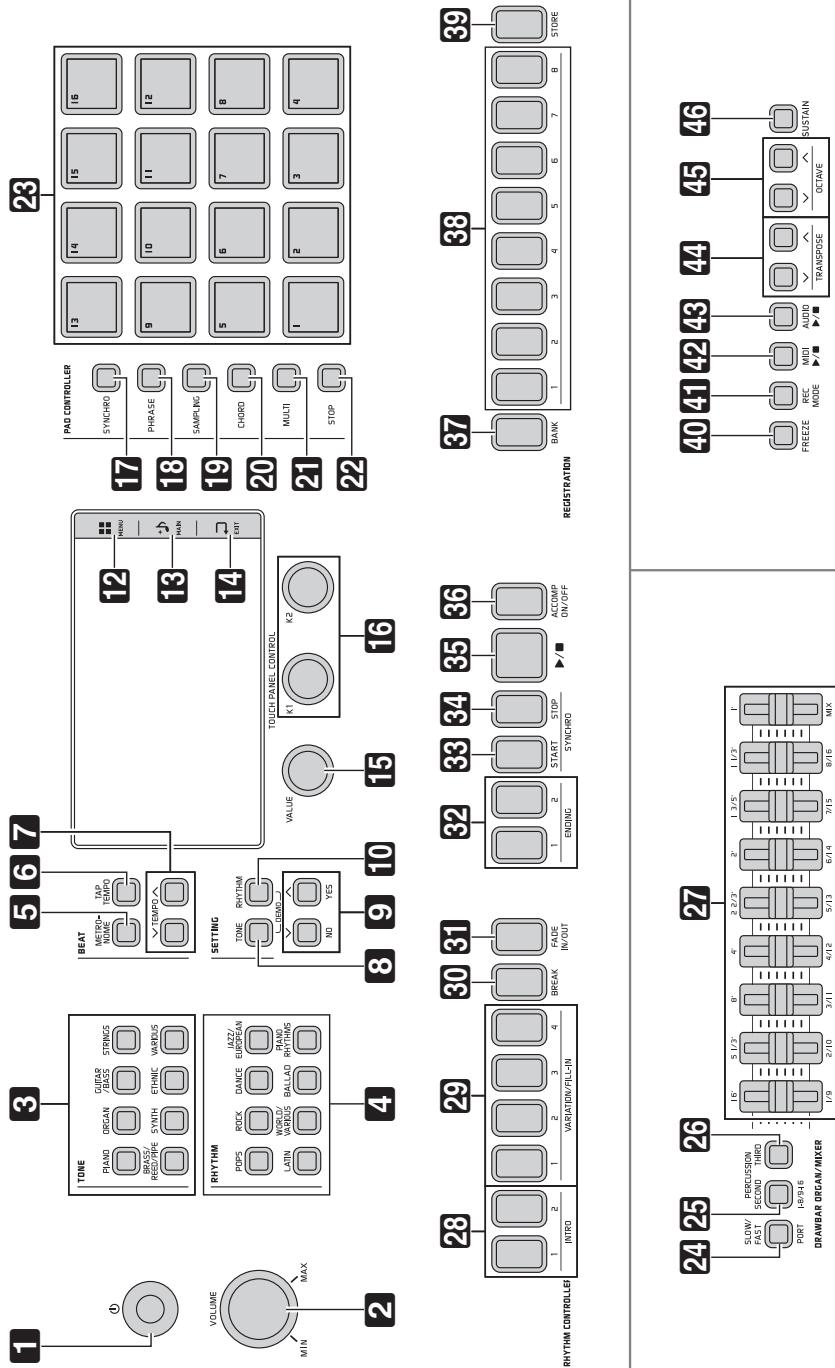
Root Chord Type	C	C [#] /D [#]	D	(D [#])/E [#]	E	F	F [#] /G [#]	G	(G [#])/A [#]	A	(A [#])/B [#]	B
6												
m6												
add9												
madd9												
69												
m69												
7 (b9)												
7 (9)												
7 (#9)												
7 (#11)												
7 (b13)												
7 (13)												
m7 (9)												
m7 (11)												
M7 (9)												
mM7 (9)												
5												
8												

- Since the chord input range is limited, this model may not support some of the chords shown above.

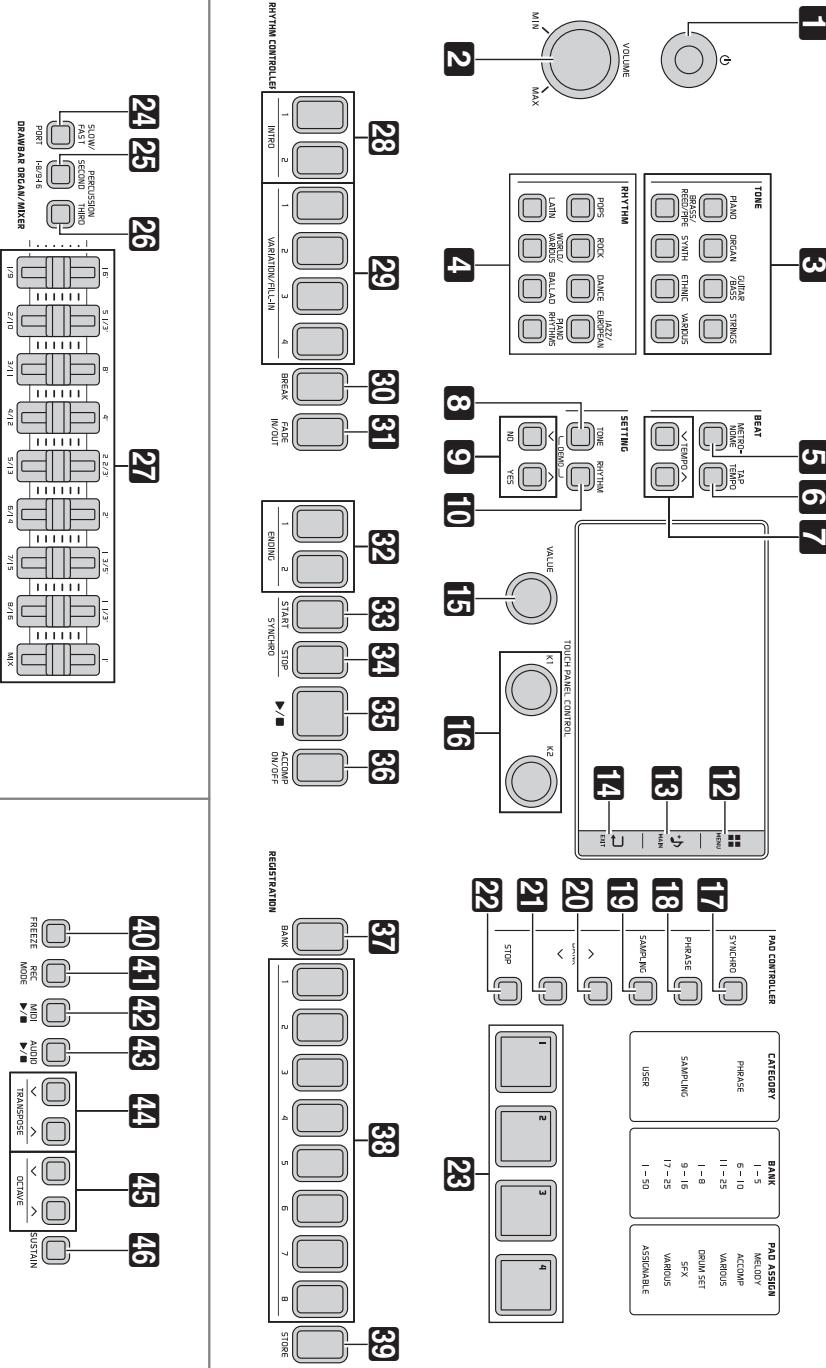
- Debido a que el rango de entrada de acordes es limitado, es posible que este modelo no admita algunos de los acordes mostrados arriba.

- Cut this page along the dashed line so you can have it on hand as you read the contents of the manual.
- Recorte esta página por la línea de puntos para tenerla a mano mientras continúa leyendo este manual.

MZ-X500



MZ-X300





This recycle mark indicates that the packaging conforms to the environmental protection legislation in Germany.

Esta marca de reciclaje indica que el empaquetado se ajusta a la legislación de protección ambiental en Alemania.

CASIO[®]

[K] MA1510-A Printed in China



MZX500/300-ES-1A

CASIO COMPUTER CO., LTD.
6-2, Hon-machi 1-chome
Shibuya-ku, Tokyo 151-8543, Japan

© 2015 CASIO COMPUTER CO., LTD.